

# SmartVMS<sup>TM</sup> Security Management System Server

# **User Guide**

April 2015

www.smart-vms.com



### **Contents**

1.	Quick Start	6
	1.1 Locating application	6
	1.2 License request	6
	1.3 License activation	10
	1.4 Login to server application	11
	1.5 Quick Setup wizard	12
	1.5.1 Site Settings	12
	1.5.2 Quick Setup – Recording drives	13
	1.5.3 Quick setup – Users	15
	1.5.4 Quick setup – Change Password	17
	1.5.5 Communication	19
	1.5.6 Change Site Name and Site ID	20
2.	Server Configuration	22
	2.1 Video Devices – Channels	22
	2.1.1 Add video channel	22
	2.1.2 Video view mode	25
	2.1.3 List view mode	26
	2.1.4 Adding multiple cameras	30
	2.1.5 Using dual/triple streaming	32
	2.1.6 Video channel details	33
	2.1.7 Recording settings/plan/options	35
	2.1.8 Camera configuration – PTZ	37
	2.1.9 Camera configuration – Presets	38
	2.1.10 Camera configuration – Tours	39
	2.1.11 Analytics settings	41
	2.2 Video Devices - Sequences	42
	2.2.1 Video view mode	42
	2.2.2 List view mode	44
	2.2.3 Sequences details	45
	2.3 Audio Device	46

2.4 Device Groups	
2.3.1 Groups	
2.3.2 Group Details	51
2.4 Status	52
2.4.1 Channel status	52
2.4.2 Recording status	53
2.4.3 Video analytics status	54
2.4.4 Bandwidth status	55
2.4.5 Storage space	56
2.4.6 Video parameters	57
2.4.7 Camera Parameters	58
2.4.8 Connected clients	59
2.4.9 Phone communication	60
2.5 Reports and Export	60
2.5.1 Alarms	61
2.5.2 Default video export settings	62
2.6 Communication	63
2.6.1 Network	63
2.6.2 Email settings	65
2.6.3 Phone Settings	66
2.6.4 FTP Settings	67
2.6.5 Video Streaming	68
2.6.7 Restrictions	69
2.6.8 RSS Feed Settings	70
2.6.9 External Database	71
2.7 Security devices	72
2.7.1 Devices	72
2.7.2 Device Alarms	73
2.7.3 Device Alarms Rules	75
2.7.4 GPP Device Status	78
2.7.4 Device Communication	80
2.7 Keyboards and Joysticks	81
2.7.1 Configuring keyboard and joysticks	81
2.7.2 Keyboard and Joystick details	82

2.7.3 Keyboard and Joystick status	83
2.8 Users and Privileges	84
2.8.1 Users	84
2.8.2 Active directory users	86
2.8.3 Privileges	87
2.8.4 PTZ Priority	90
2.8.5 Change password	91
2.9 Alarm management	92
2.9.1 Alarm handling	92
2.9.2 Alarm Rules	96
2.9.2 Generate test alarm	
2.10 Data management	
2.10.1 Recording drives	
2.10.2 Activity logs	
2.10.3 Manual operations	
2.10.4 Scheduled operations	
2.10.5 Recording History	
2.11 Remote Backup	
2.11.1 Remote Backup	
2.11.2 Recording Drives	
2.11 Tasks	
2.11.1 Surveillance tasks	
2.12 Linked Servers	
2.12.1 Failover Server	
2.12.2 Redundant Server	
2.13 Server settings	
2.13.1 Import and Export	
2.13.2 Resources	
2.13.3. Preferences	
2.13.4 Preferences (Camera)	
2.13.5 Preferences (Notification)	
2.13.6 Preferences (Playback)	
2.13.1 Application maintenance	
2.13.2 Computer maintenance	

SmartVMS<sup>™</sup> Security Management System Server – User Guide <u>www.smart-vms.com</u>

2.14 Video panorama	126
2.15 User interface settings	131
2.15.1 Alarm settings	131
2.15.2 Display settings	134
2.15.3 Map settings	137
2.15.3 Overlay settings	138
2.15.4 Language settings	139
3. Views	140
3.1 Toolbar buttons	140
3.2 Live Video screen	143
3.3 Playback Video Screen	160
3.4 Map screen	161
3.4.1 Static map (2D image)	162
3.4.2 Interactive maps – Google	168
3.4.3 Interactive maps – Open Street	169
3.4.4 Map Configuration	170
3.5 Analytics screen	172
3.6 Alarm screen	173
3.7 Active alarm screen	174
3.8 Alarm search screen	175
3.9 User logs screen	177
3.9.1 Session logs	177
3.9.2 Search logs	178
3.10 Search video bookmark screen	179
3.11 Offline data viewer	181
3.12 Video panorama screen	182
3.13 Export screen	183
3.14 Object Counting Reports	185
3.15 Video Search	186
3.16 License Information	187
3.17 Help	187
3.18 About	187
3.19 Lock Server	187



### 1. Quick Start

Execute the 'Security Management System Server' installable on the target server computer. Follow the wizard to complete the installation.

### 1.1 Locating application

Execute the 'Security Management System Server' application from the desktop shortcut or from the programs menu shortcut under 'Security Management System\Server Software'.

### 1.2 License request

The 'Security Management System Server' application displays a license dialog box when license for this software is expired or is not available.

The 'Security Management System Server' application needs a 'computer specific license'. Which means that licensing process needs to be followed for every computer on which the 'Security Management System Server' application is installed.

The licensing process involves following steps -

(a) Capturing hardware information and creating license request file – managed by the licensing Wizard

(b) E-mailing the license request file to license administrator – advisable to manage this step manually by sending the license request file as e-mail attachment through any standard e-mail program

(c) The license manager generates 'license activation file' and e-mails it back to the license requestor.

(d) Receiving the 'license activation file' and activating the license

License Manager
Product Name: Security Management System - Evaluation Version License Status: License not activated
<ul> <li>License file is not available</li> <li>Request License File</li> <li>(If you are first time user, please click on this 'Request License File' button, to initiate the license request process.)</li> </ul>
CLicense file is available
Online Activation
Close Help

For more information on how to get the license, please click on 'Help' button present on the license manager dialog. This will pop up separate dialog box which mentions steps for getting the license.

Requesting and Activating the License	×
<ul> <li>(A) Requesting the License file</li> <li>1. Please select the 'License file is not available' radio button.</li> <li>2. Please click on the 'Request License File'' button.</li> <li>3. This will pop up the 'Request License File' dialog box.</li> <li>4. Please fill up the license request information.</li> <li>5. Please click on the 'Save Request File' button to save the license request ('*.lid.txt') file to the hard disk.</li> <li>6. This will pop up the 'License Request File Saved' dialog box, which displays the location of the saved license request ('*.lid.txt') file.</li> <li>7. Click on the 'Browse Folder Containing the License Request File' link to open the Windows Explorer and access the license request ('*.lid.txt') file.</li> <li>8. Click on the 'OK' button to close the 'License Request File Saved' dialog box.</li> <li>9. Please e-mail the the saved license request ('*.lid.txt') file as an attachment; to the e-mail address Note - If e-mail access is not available from the deployment computer; the license request ('*.lid.txt') file can be copied to any other computer and then e-mailed.</li> <li>10. The license request will be processed in 1 working day and you will receive the license activation ('*.lic.txt') file by e-mail, as an e-mail attachment. The e-mail will be sent as reply to your original license request e-mail.</li> </ul>	
<ul> <li>(B) Activating the License</li> <li>1. Save the license activation (**.lic.txt') file, to the hard disk at any suitable location on the deployment computer.</li> <li>2. Execute the application again. It will pop up the 'License Manager' dialog box.</li> <li>3. Please select the 'License file is available' radio button.</li> <li>4. Please click on the 'Activate License' button.</li> <li>5. This will pop up the 'Activate License' dialog box.</li> <li>6. Please type the path of the saved license activation (**.lic.txt') file or use the 'Browse ()' button to navigate to and to select the saved license activation (**.lic.txt') file.</li> <li>7. Click on the 'Activate' button to activate the license.</li> <li>8. Once the license is activated successfully, all the dialog boxes from the license wizard will close and the application will launch successfully.</li> </ul>	
More help: . Support: .	
Close	

Click on 'Request License File...' button. This will pop up 'Confirmation' dialog, which describes the licensing policy and the process. Click on the 'Proceed' button to move ahead.

Confirmation Conf	License Manager	×	
	License Status: License not activated	Licensing Process: 1. The licensing creates a unique computer signature, which includes following information – (a) Motherboard ID, (b) Hard disk ID for all available hard disks and (c) Network card interface ID for all available network interfaces. 2. The license is generated and is valid for this unique computer signature. 3. If there are any changes in the computer hardware, license validation fails and the licensing wizard displays 'Computer Not Authorized' error. 4. Hence it is recommended to confirm the computer configuration before requesting the license. Note - Specifically the devices like internet cards / data cards which add temporary network interfaces to the computer should be disconnected	
Activate License     Please click on the 'Proceed' button to continue the license request process.       Please click on the 'Abort' button to cancel.       Proceed       Activate License       Close       Help	Online Activation	Please click on the 'Proceed' button to continue the license request process. Please click on the 'Abort' button to cancel.	

A license request form will be displayed. Please fill up the form and send the license request file to the e-mail address specified in the licensing wizard. It is advisable to click on the 'Save Request file' button and e-mail the saved license request file using any e-mail client program.

The license administrator will receive the 'license request file' and will create the 'license activation file' and will e-mail it back.

Request License			X
License Information Product name: Number of cameras* ✓ Enable Video Anal User Information User name*: User e-mail ID*: Contact number*: Company name*: Company website*:		computer. If licenses a recommended to fill up	onal inputs related to the identification of the deployment are required for multiple computers, it is highly the deployment site description and computer description type the description which can help you to identify the uniquely.
	Request by E-mail (To be used by Advanced Users only)	Save Request Fi	le Close



### 1.3 License activation

When you have 'license activation file', select option 'License file is available' and click 'Activate License...' button. A dialog box will be popped up which asks for 'license activation file' path, provide correct license path and click on the 'Activate License' button to activate the license.

License Manager	X
Product Name: Security Management System - Evaluation Vers License Status: License not activated	ion
<ul> <li>License file is not available</li> <li>Request License File</li> <li>(If you are first time user this 'Request License File initiate the license request</li> <li>License file is available</li> <li>Activate License</li> <li>Online Activation</li> <li>Activate License</li> </ul>	
Close	Help

### 1.4 Login to server application

The 'Login' window will be displayed.

Security Mar	nagement System Login
	V 14.07.11.01
User Name:	admin
Password:	•••••
	M 🖉 🖉

Please type the default username and password

'User name' as 'admin' (case sensitive, without the single quote characters) 'Password' as 'admin' (case sensitive, without the single quote characters)



### 1.5 Quick Setup wizard

The main application window will be displayed and you will be prompted to configure system with "**Quick Setup**" wizard.

The 'Quick Setup' wizard includes the minimal settings which are required to get the 'Security Management System Server' application up and running.

### **1.5.1 Site Settings**

The first step from wizard allows you to define Site name and 'Output IP address' which will be used by remote clients to connect to server application.

	Quick setup
Site settings	
Site ID:	Site_645A04A3DF13
Site Name:	New Office Building
	192.168.0.64
Output IP address (Client connections):	192.108.0.04
Note: Configure site name and o	putput IP address



### **1.5.2 Quick Setup – Recording drives**

Recording drives configuration is an important setting. Through this, you can configure multiple recording drives for recording of video streams and other data collected by the software.

					Quick	setup		
Rec	ord	ing driv	es					
		Recycle						1
			t delete alarn					
	R	ecycle :	start threshol	d:	20	GB		
	R	ecycle :	stop threshol	d:	50	GB		0
	Low	/ disk sj	pace alarm th	reshold:	10	GB		-
	Rec	ording	drive: C:\	~	4			
	Reco	ording a	lrive(s):			Refreshing in 53 seco	onds	
	s.	Drive	Total size	Free size		d recording time		
	1	D:\	365.75 GB	330.12 GB	33 days	12 hours and 50 minu		
	~						2	
	~	>				<u>-</u>	<b>**</b>	
Note	e: Se	etup rec	ording drives					$\leftarrow$

Click on "Edit" button to configure settings.

- 1. You can add more drives for recording video streams using add recording drive button.
- 2. Select any drive from the list and click "Remove recording drive" button to remove selected recording drive from the list of recording drives.

3. "Recycle drives" when checked automatically overwrites data when application finds the recording space to be low for a specific recording drive.

Check 'Do not delete alarm data' so that application will not delete data associated with alarms while recycling recording drives.

You can specify thresholds to start recycling data and stop recycling of data from this user interface.

If 'Recycle data' is unchecked, application will not recycle (or overwrite) video data when it found less space for recording, instead it will give alarm "Low disk space" to the user. You can configure the low disk space alarm threshold.

Recording drive list shows more information like total size of the drive, current free space for the drive, and expected recording time for the drive. This information will get updated/refreshed every 60 seconds.



Click on "Next" button *to move to next step in the wizard setup.* 

### 1.5.3 Quick setup - Users

This step allows configuring users of the system. Application shows the list of added

users in the system, allows you to add new users using "Add user" button \_\_\_\_\_, allows

you to remove added user using "Remove user" button

#### Add new user –

Type any valid string as 'User Name' for the new user. Type any valid string as 'Password' for the new user, Re-type the password for confirmation, in the 'Confirm Password' text box. Select 'Privilege' as 'Operator'. The 'Enable user' checkbox should be shocked.

The 'Enable user' checkbox should be checked.

Click on the 'Add' button **to** add the new user.

	And and a second se
User Name:	Operator1
Password:	•••••
Confirm Password:	•••••
Privilege:	Operator 🔹
	🔽 Enable user
Address Line 1:	Address line1
Address Line 2:	Address line1
Phone No:	991122334455
E-mail ID:	emailme@mydomain.co
-	₽

It is recommended to add at least one new user with Operator privilege. This user can login from the Security Management System client application. If at least one user with Operator privilege is not added, the application displays a warning message.

After successful addition of user, application will show newly added user in the list of users, you can add more users as per the requirement by repeating above steps.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com

Sr No.	User Name	Privilege	Enabled	Туре	
1	admin	Administrator	Enabled	In Built	
2	Operator1	Operator	Enabled	Configured	

Click on "Next" button to advance to next step in quick setup wizard.

Click on "Back" button to go back to previous step in quick setup wizard.



### 1.5.4 Quick setup – Change Password

It is highly recommended not using the default password, and changing the password of the 'admin' user, for better security of the system.

Quick set	up du du	· ·	10 (A)	- 120 m
Chan	ge Password			
Ci	urrent User:	admin		2
O	d Password:			
Ne	ew Password:			
C	onfirm New Password:			
Note:	Change password			

Click on the 'Edit' button

Specify the correct 'Old Password'.

Type the 'New Password' and re-type the new password in 'Confirm New Password'.

Click on the 'Save' button to save the changes.

This new password should be used for the 'admin' user login from next login.

If the default password for the current login (which is 'admin' user login) is not changed, application displays a warning message.

Click on 'Next' *button to move forward.* 

Click on "Finish" button *local* to finish quick setup wizard.

Now system is ready with basic configuration, please add cameras to the system now.



#### **1.5.5 Communication**

Please click on edit button to edit network communication settings.

Security Management System - Server (User=a	dmin, Privilege=Administrator)		
	Image: Constraint of the second sec		V 12.10.26.06
192.168.0.58	Communication $\rightarrow$ Network		
Site_207C8F1117F4			
Video devices Channel groups	Input IP address (Connections to cameras):	192.168.0.58 💌	
Status	Output IP address	192,168.0.58	<b>Let</b>
Reports and Export	(Client connections):	192.168.0.58	0
Communication	TCP port1:	5500	
Network	RTSP port (TCP):	1024	
Email settings		20000	
Video streaming	RTP port (UDP):		
Security devices	RTCP port (UDP):	20001	
Keyboards and Joysticks	HTTP port (TCP):	9900	
Users and Privileges	Web address:	http://192.168.0.58:9900	
Alarm management Data management			
Tasks			
Failover recording			
Server computer settings			
Video panorama			
User interface settings			

Click on edit button available on the right hand side, to enable editing on this dialog.

Change 'Input IP address. This IP address is used for communication with the cameras.

Change 'Output IP address'. This IP address is used by client applications to connect to this server.

Click on 'Save' button <u>definition</u>, after your changes are done.

Click on 'Cancel' button to discard your current edited changes. Application will disable user interface showing currently used settings.

'Reset communication' button can be used to resolve any issues observed while client applications connection to this server. This button is expected to be used only in extreme conditions where network may become unstable which may affect the working of the software in rare cases. This button can quickly rectify such error conditions.

Port numbers are used by the client applications while connecting to this server.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com



The URL displayed next to 'Web address' can be used to connect to this Security Management System server application from browser based clients like Internet Explorer, Mozilla Firefox, Apple Safari etc.

### 1.5.6 Change Site Name and Site ID

Click on "Change Site ID and Site Name' button available on the right hand side to change site ID and site name.

<ul> <li>►</li> <li>►</li></ul>		deo devic	Channels	*** •			<b>• • • • • • • • • •</b>	4.07.11.01
New Office Building	2	4	b 📝 💉	<b>≆ × </b> ♥	<b>9 E</b> 3	×	୦ନ୍ତୁ ବହୁ	
Video devices		Sr No	Channel Name	Channel ID	Description	Video Stream Type	Parameter	
Sequences		1	Main Gate En			Video Clip	E:\Softwar	
Audio devices		2	South Gate	VC_SouthGate	South Gate	•	E:\Softwar	
Device groups								
Status								
Reports and Export								
Communication								
Security devices								
Keyboards and Joysticks								
Users and Privileges								
Alarm management								
Data management								
Remote backup								
Tasks								
Linked servers		<					>	-
Server settings								
Video panorama								
User interface settings	~							

This will popup dialog where you can enter new site name and refresh site ID.

Update	e Site ID And Site Name
Site ID:	Site_645A04A3DF13
Site Name:	New Office Building
	0

Use 'Refresh Site ID' to change the site ID.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide <u>www.smart-vms.com</u>

Use 'Save' button **w** to save new site name and site id.

Use 'Cancel' button to cancel the update of site id and site name.



### 2. Server Configuration

The server can be configured from the navigation menus available on the left hand side of the main window.

### 2.1 Video Devices – Channels

This link displays the list of currently configured video channels. There are two modes for displaying channels.

### 2.1.1 Add video channel

Please select 'Video Devices->Channels' page to add video channels to the system.

To add video channel, click on **the** button. This will pop up the 'Add Video Channel' dialog box.

Sec	urity Ma	anagem	ent System - Ser	ver (User=admin,	Privilege=Adm	inistrator)		- 🗆 🗙
Image: wide wide wide wide wide wide wide wide				*** •	P		••••••••••••••••••••••••••••••••••••••	14.07.11.01
192.168.0.64		eo device	es → Channels					1
New Office Building	1	J. A		a				
Video devices		4	7 🗾 📶	Y 🕺	🦫 🔚 🕽	<u>S</u>	<del>7</del> X	
Channels		Sr No.	Channel Name	Channel ID	Description	Video Stream Type	Paramete	
Sequences								
Audio devices								
Device groups								
Status								
Reports and Export								
Communication								
Security devices								
Keyboards and Joysticks								
Users and Privileges								
Alarm management								
Data management								
Remote backup								
Tasks								
Linked servers		<					>	
Server settings								
Video panorama								
User interface settings								

	Add video channel ×
Channel Name:	Main Gate Entry
Channel ID:	VC_ Cam099
Channel Description:	Main Gate Entry Camera
Video Source Type:	Axis IP Device
IP address:	192 . 168 . 1 . 100
User name:	root
Password:	••••
HTTP Port:	80
RTSP Port:	554
Camera number:	1
Firmware version:	5.XX ¥
Display stream 1	Display stream 2
Stream type: H.264 🗸	Select stream: Use display stream 1 V
	Stream type: MJPEG V
Recording stream	Motion detection and video analytics stream
Select stream: Use display stream 1	✓ Select stream: Use display stream 1 ✓
Stream type: H.264 V	Stream type: H.264 V

Please type the 'Channel Name', next to the 'Channel Name' textbox. The name string can contain any characters or digits.

Please type the 'Channel description', it can be any string. Channel description is useful for other users and operators to identify a camera/channel correctly, since the channel name may be short and may not be able to provide all information about the camera. Please select the 'Video Source Type', as per the make and model of the video server / the camera to be added.

Please provide the video server / camera connection information, as per the user interface elements displayed on the dialog box. These elements change based on the video source type selection.

Click on the 'Add' button to connect to the video source, application displays connecting dialog box, please wait while application connects to the requested video source or camera.



Click on "Cancel" button *level* if you wish not to add the video channel.

Once the video channel is added, the 'Recording settings' dialog box will be popped up. Recording settings for the newly added channel can be configured from this dialog box. Please select the 'Continuous' recording mode, and click on the Save button

the dialog box. (Detailed description of to save the settings and to close recording modes is available in later sections in this document).

			F	Reco	rdi	ng	set	ting	)s -	Ma	ain	Ga	te	Ent	Ŋ												>
Channel de	etails																										
Channel I	D: VC_Cam	107																					-	20	Mil.	-	
	Description:																								10		
	No. of the second s																					P	2	TE	and a		
	Irce Type: Vi	1999-1998-1998-1998-1998-1998-1998-1998	10000																			1				1	
Recording	Drive: D:	\	*																				0		4	1	
Recording	mode																										
-	_																										1
O Continue	uous 🔿 N	o recording								R	Je	ba	sec	1	Bo	oth					~						2
	_														12											0	
																										-	-
	schedule se	ttings			-							502			2 11					- 10						on: 18	
Select		Days/H	lours->	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22 23	
O De-selec	t	Sunda	y																								
		Monda																									
		Tuesda																									
		Wedn																									
		Thruse	lay			_					_														_	4	
		Friday	N. A.1																						-	╞	
		Saturd	ау			-			_									_	_						-		Ł
Enable	7/18/2014	v Overri	de 1																								
Enable	7/19/2014	v Overri	de 2																Π		Π				1		
Enable	7/20/2014	V Overri	de 3																						T		
Enable	7/21/2014	v Overri	de 4																						Î		
Enable	7/22/2014	V Overri	de 5			-																					
Record on	alarm settir	gs																									
Pre alarm r		10	secon	ds				Re	cor	d at	ful	II FI	PS	on a	alar	m o	or m	oti	on	(lov	N FI	PS (	oth		ise)		
			-	-				Pre	-al	arm	ful	II FF	PSI	reco	ordi	ng i	nte	rva	ıl:		10			1	seco	onds	
Post alarm	recording:	10	secon	ds				Doe	+ -	alarr	- 6	.11 0	EDC				1-1		.t.		10				core	nds	

Application will show newly added video channel in list.

Please click on the 'Add video channel' button **u**, to add more channels, and follow the same procedure, as mentioned in above step.

#### 2.1.2 Video view mode

	Security Management System - Server (User=admin,Privilege=Administrator) – 🗖 💌
<b>&gt;&gt; &gt;&gt; &gt;&gt; &gt;&gt; &gt;&gt;</b>	▲       ▲       ▲       ▲       ▲       ▲       ▲       ↓
	Video devices - Channels
Video devices	
Channels	Main Gate Entry 🔠 🗶 South Gate 🚊 🗶 North Gate 🔠 🗶
Sequences	
Audio devices	
Device groups	Dataster lander
Status	J2
Reports and Export	<b></b>
Communication	
Security devices	
Keyboards and Joysticks	
Users and Privileges	
Alarm management	
Data management	
Remote backup	
Tasks	
Linked servers	
Server settings	
Video panorama	🔿 List view 💿 Video view 🔣 🚺 🚺 📮 📝 🕅
User interface settings	

'Add video channel' button ( or or on video view) can be used to add and configure a new video channel.

button to add more than one video channel into the system.

Use 🖉 t

Use

button to edit more than one video channel at a time.

Use button to update recording settings to one or more videos simultaneously.

Use button to edit one or more video channel settings simultaneously.

The 'Remove channel' (**X**on video view) button can be used to delete the video channel.

The 'Details' button (<sup>1</sup>Con video view) can be used to view the setting of that video channel

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com



Use button to play audio from all channels, audio will start only for those for which audio has been enabled during addition/editing video channel.

Use **button** to mute audio from all channels.

You can navigate between videos using page navigation toolbar.

1 📥 🕑 🕑
---------

#### 2.1.3 List view mode

S	ecurity Manag	ement System - Ser	ver (User=admin	Privilege=Adm,	inistrator)		
Image: Weight of the second		Vices – Channels	** **	P	60		14.07.11.01
		vices - channels					
New Office Building	1	dh 🧳 💉	🗊 🗶 🎈	🍤 🖹 🕽	(	00 00	
Video devices			Y 🔨 Y	<u> 10</u>			
Channels	Sr N	o. Channel Name	Channel ID	Description	Video Stream Type	Paramete	
Main Gate Entry	1		VC_MainGate			E:\Softwa	
South Gate	2	South Gate	VC_SouthGate	South Gate	Video Clip	E:\Softwa	
Sequences							
Audio devices							
Device groups							
Status							
Reports and Export							
Communication							
Security devices							
Keyboards and Joysticks							
Users and Privileges							
Alarm management							
Data management							<u> </u>
Remote backup	<						÷
Tasks							
Linked servers							
Server settings	×						

This mode displays all configured video channels in the list with details like channel name, channel ID, description, video stream type, display resolution(s).

Toolbar buttons can be used to setup video channels in the system.

Use **setup** button to add single video channel – already discussed in 'Quick setup' section above.



Use button to add one or more video channels simultaneously (described below)

Use **button** to edit connection settings for selected video channel from list.

Use *button to edit connection settings for more than one video channel.* 

Use **W** button to edit recording settings for one or more video channels.

Use button to edit video parameters (resolution, bit rate, fps etc.) for one or more video cameras configured in the system.

Use button to play audio from all channels, audio will start only for those for which audio has been enabled during addition/editing video channel.

Use **button to mute audio from all channels.** 

Use button add linked channel groups. Linked channel's which share common connection parameter like IP address. These channels can be viewed under one node in live and playback video screens tree control.

		А	dd Linked Channels											
Group	Information													
Grou	up Name:	Office 120-	South Block											
Grou	up Type:	AMG Panog	genics 360 Degrees IP Camera											
IP A	ddress:	192.168												
		4												
÷														
Sr No.	Channel Name	Channel ID	Video Stream Type	Parameter1	Recording Mode									
1	Cam101	VC_Cam101	AMG Panogenics 36	(Fisheye)	Continuous									
	×	-	0											

Use witton to edit linked camera group names.

	Linke	ed Channel Groups	×
elect gro hannels		ith Block	~
Sr No.	Channel Name	Parameter1	
1	Cam101	192.168.0.64(Fisheye)	
Group na	ame: Office 120-S	outh Block	

Use button to save the new group name for selected linked camera group.

Other options from list view mode page as,

Use button to see details for selected video channel from the list.

Use **^** button to remove selected video channel from the system.

Use button to reset all the cameras. This is expected to be used only in extreme situations when cameras display 'Video Loss' due to problem in the network or cameras due to some accidental or abrupt situations. This will disconnect all the cameras and reconnect them immediately.

Use button to save the configured video channel information into standard format like text, xml, PDF or standard CSV format.

Use "Move Up" and "Move Down" buttons for moving up or down video channel in the order of the list.

#### 2.1.4 Adding multiple cameras

Use **which the set of the set of** 

Select video source type from available options.

Add multiple IP addresses into list box (Please note – 'IP address' is an example here, cameras can have unique parameters other than IP address or may have more than one unique parameter e.g. IP address with channel number can be unique parameter).

Ad	dd Multiple Video Channels
Video Source Type:	Axis IP Device 🗸 🗸
IP address:	192 . 168 . 0 . 101
Configured channels:	Sr No.       IP address       Image: Constraint of the second sec
User name:	admin
Password:	••••
HTTP Port:	80
RTSP Port:	554
Camera number:	1
Firmware version:	5.XX ¥
Display stream 1	Display stream 2
Stream type: H.264	Select stream: Use display stream 1
	Stream type: MJPEG 🗸
Recording stream	Motion detection and video analytics stream
Select stream: Use display stream 1	Select stream: Use display stream 1 v
Stream type: H.264 V	Stream type: H.264 v

Use *set* button to add cameras within specified IP range.

Use Substitution to search cameras on the network. (*This is camera dependent feature*) SmartVMS<sup>™</sup> Security Management System Server – User Guide www.smart-vms.com

Use 🔄 button to remove duplicate parameters from list box.

Use **X** button to remove selected cameras from the list box.

Configure remaining parameters which would apply for all cameras to be added.

Click on 'Add cameras' button to add the specified cameras to the system.



### 2.1.5 Using dual/triple streaming

Many cameras provide dual or triple streaming support, with each stream configured with different set of parameters (resolution, frame rate, bit rate, quality etc.).

Security Management System intelligently uses multiple streams from cameras to lower the resources utilization to minimum possible levels and still provide the expected quality output.

Hence it is recommended to use dual or multiple streams while adding video sources to Security Management System.

The 'Camera Configuration Guidelines' document (which is available separately) provides more detailed description on configuration options and steps for using multiple streams in Security Management System.

### 2.1.6 Video channel details

The 'Channels' link has sub-links, one for every video channel added in the system. Clicking on any of these sub-links displays the channel details page for that channel.

	Security Management System - Server (User=admin,Privilege=Administra	ator) – 🗆 🗙									
► ★ ★ ★ ★											
192.168.0.64	📝 Video devices – Channels – Main Gate Entry										
New Office Building	Channel Name Main Gate Entry	A state on a state on a state of the state									
Video devices	Parameter Name Parameter Value										
Channels	Channel ID VC MainGateEntry	and the second second									
Main Gate Entry	Channel Description Main Gate Entry Camera										
South Gate	Video Source Type Video Clip										
	Display Resolution 320x240 pixels										
Sequences	Recording Resolution 320x240 pixels										
Audio devices	Recording Mode Continuous	Y flip video									
Device groups	Manual Recording State Off	Show analytics status									
Status	Recording Drive D:\										
Reports and Export	Video Parameters -										
	- Video clip path E:\SampleMedia\Sample004.avi	Camera PTZ									
Communication											
Security devices											
Keyboards and Joysticks											
Users and Privileges	GPS co-ordinates										
Alarm management	Use GPS co-ordinates										
Data management	Latitude: 0										
Remote backup	Longitude: 0										
Tasks											
Linked servers	A 3 2 3 10	<b>ee</b>									
Server settings											

The channel details page shows the configuration settings along with the video source information, resolutions and also the live video thumbnail view.

Use **Solution** (present immediate to channel name) to change video channel name.

**'Y-flip video'** checkbox can be used to enable flipping of video in Y direction. This setting is useful when the video orientation for any video channel does not match with the software orientation and the video is upside down by default.

**'Show analytics status'** check box can be used to embed video analytics metadata when analytics is enabled for this video channel.

'Motion detection' option can be one of the following 3 sub-options.

- 'Motion detection off' application will not do motion detection on channel.
- 'Motion from application' motion detection is processed from application.
- 'Motion from camera' motion detection is done by camera and application will use this information to save the alarm.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com

## **SmartVMS**™

Camera PTZ – Check this option if the video channel supports PTZ operations.

This will add 'Camera PTZ' button <sup>11</sup> to the bottom part of the page.

Use **Solution** to update video channel parameters.

Use

Use

button to update recording settings for the video channel.

Use *button to adjust image properties like brightness, contrast etc.* 

button can be used to configure video analytics settings for that channel.

Use button (disabled in above figure, this button will be enabled when analytics is ON for the video channel) can be used to reset the analytics processing and to restart the analytics processing.

Use button to control pan-tilt-zoom for the video channel. You can also configure camera 'Presets' and 'Tour' from the popped up dialog.

Use button to reset the camera. Application will reset the camera stream by disconnecting from this camera and reconnect to it immediately. This button expected to be used only in extreme cases where there is accidental or abrupt changes to network or camera by which camera is not showing video stream in the application.

You can also define GPS co-ordinates (Latitude and Longitude) of the camera by enabling 'Use GPS co-ordinates', the GPS coordinates information '<geo:lat>' and '<geo:long>' is included in the RSS feed response of alarm if enabled for camera.

Other options (dependent on camera feature support)

- → Configuring 'Camera alarms' use button
- → Send audio to camera (2-way audio) check box below 'Camera PTZ' option.
- ➔ Motion detection settings button → can be seen when 'Motion detection from application' is selected – can be used to configure motion detection parameters such as motion detection sensitivity, area on which motion detection to be performed etc.

### 2.1.7 Recording settings/plan/options

The recording settings can be configured for each channel independently.

	F	Reco	ordi	ing	se	ttin	gs	- M	lain	n Ga	ate	Ent	ry												×
Channel details Channel ID: VC_MainGateEntry Channel Description: Main Gate Entry Camera Video Source Type: Video Clip Recording Drive: D:\  Recording mode																									
○ Continuous ○ No re	-						(	• R	tule	ba	ise	ł	Bo	oth					<b>&gt;</b>						2
Select	-	-		-	-		-	-	_	-	-														
0	Days/Hours->	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
○ De-select	Sunday Monday		╞			$\vdash$	$\vdash$	$\vdash$		╞															
	Tuesday					╞	╞	╞		╞	╢──								$\parallel$	$\parallel$					
	Wednesday		$\vdash$	$\vdash$		╢──	╞	┢		╞	╟								$\vdash$	$\vdash$					
	Thrusday		$\parallel$	╞		╢──	╞	╞		╞	╟								$\vdash$						
	Friday		$\parallel$	╞		╢──	╞	╞	╞	╞	╢──								╞						
	Saturday			╞	$\vdash$	╢──	╞	╢──	╞	╞	╢──								╞						
	Saturday						+				-														-
□ Enable 7/18/2014 ∨	Override 1																								
□ Enable 7/19/2014 ∨	Override 2						$\vdash$	$\vdash$		╞	╞														
□ Enable 7/20/2014 ∨	Override 3		$\vdash$			$\vdash$	╞	$\vdash$		╞	╞														
□ Enable 7/20/2014 ∨	Override 4					$\vdash$	╞	+		╞	╞							H							
□ Enable 7/22/2014 ∨	Override 5							$\vdash$										H							
	overnie 5		1		Π	1	1	Π	Π	I	1	1							1	1	Π				
Record on alarm settings					_	_																			
Pre alarm recording: 10	) secon	ds			L								alar					(lo			oth			•	
		da				Pr	e-a	larn	n fu	ill F	PS	reco	ordi	ng	inte	erva	al:		10	)				ond	-
Post alarm recording:         10         seconds         Post-alarm full FPS recording interval:         10         seconds																									

The recording drive to record the data for this selected channel can be selected from the available options. The available options include all the recording drives configured in the software. The recording drives can be configured from the 'Data management -> Recording drives' settings page.

Recording mode can be one of the following

- 1. Continuous application will record video stream continuously.
- 2. No recording application will not record any video data from the stream.
- 3. Rule based this option has 3 sub-options
  - a. Scheduled –

User can configure the schedule for recording video stream day wise. User can select or deselect recording for each hour available in a week. Application also provides 5 dates which user can override and provide different settings for these dates. When overridden, application ignores day based setting for this date and follows the overridden schedule. The override happens only for the specified dates, the recording schedule switches back to the normal configuration at the end of the day (00 hours)

#### b. Alarm based -

User can choose to record video stream only when application learns any alarm. User can configure 'pre alarm recording' and 'post alarm recording' time. E.g. if user has configured 10 seconds for both pre and post alarm recording, then when application learns any alarm for video stream then application will record video streams from 10 seconds back of this alarm to 10 seconds forth of this alarm. This way user will have better recorded data of the alarm situation to observe.

#### c. Both -

User has an option to record both in schedule and alarm based too. When either of the schedule or alarm condition is met, the application will start recording video stream.

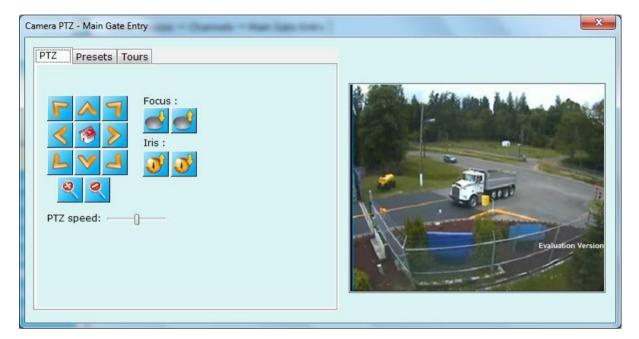
**Record at full FPS on alarm (low FPS on no-alarm)** – This feature is available in 'Continuous', Rule based- Schedule' and 'Rule based – Both' recording mode. When checked, application will record stream at low FPS (frames per second) when there is no alarm, thus saving disk space. When application receive any alarm, it will save video stream at full FPS from specified 'pre-alarm full FPS recording interval' to 'post-alarm full FPS recording interval'.



Click on 'Camera PTZ' button on 'Video details page' to popup camera PTZ dialog box. It has 3 tabs.

### 2.1.8 Camera configuration – PTZ

Use PTZ buttons available on the user interface to move camera, you can also adjust focus and iris. Camera video is shown at right part of the dialog which will immediately reflect the changes made to the camera position.



### 2.1.9 Camera configuration – Presets

If camera supports configuring presets, this tab will be visible. 'Preset list' contains all the already configured presets for the camera.

Camera PTZ - Main Gate Entry	×
PTZ Presets   Preset name :   NewPreset   Preset list:   S. Preset name   1   Home   2   WaterTankPosition   3   NewPreset    PTZ speed:  PTZ speed:	

By default, application adds 'Home' preset when camera is added. You cannot delete 'Home' preset as it will be used as reference position when 'Video Analytics' features are used for the camera.

To add new preset for the camera, adjust camera position using available PTZ

buttons. Specify preset name and click on **to** button to add new preset. The added preset can be seen in preset list and its image on right hand side the list.

Select any preset from the list, right hand side image will be updated to **show selected preset position snapshot.** 

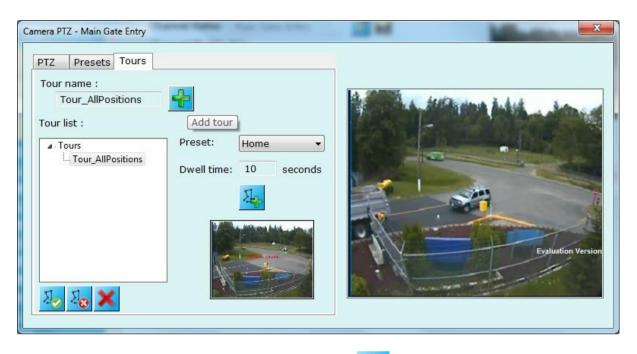
Select any preset from the list and click **from** button to **remove preset** from the camera

To update any preset, adjust camera position as per your requirement, then select

any preset from the list and click button. Selected preset will get updated with this new position after getting confirmation from user and preset snapshot image too gets updated.

Select any preset from the list and click *button* to move the camera to selected preset position.

### 2.1.10 Camera configuration - Tours



For adding 'Tour', first enter tour name and click on **to** button to add tour name to the 'Tour list' tree control.

Select tour name from the tree control and now you can go on adding 'Presets' to selected tour name from tree control.

Select any preset from the list, enter dwell time (time in seconds to which preset

should be shown before moving to next preset in a tour), and click on button to add preset to tour. Tree control will show added presets with their dwell time below the tour name. (Please refer screenshot at below page where tour is configured to 3 presets)

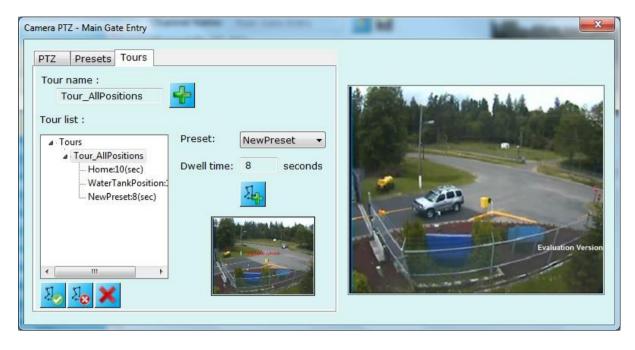
Keep doing same procedure to add more presets as per your choice.

Select any node (preset name or tour name) from the tree control and click button to remove selected node from the list.

Click on **b** to start the tour.

Click on **to** stop the tour.

Screenshot where tour 'Tour\_AllPositions' is configured with 3 preset from camera 'Main Gate Entry'



### 2.1.11 Analytics settings

User can set various analytics settings from below dialog. Settings include the area to be under supervision; by default application processes all the area for different types of alarms.

User can select for analytics options available like Intrusion detection, line crossing, wrong direction movement detection, un-attended object detection, asset protection, scene change, and object stopped, illegal parking, crowd detection, and license plate recognition.

 Analytics

 Advanced Settings

 Scheduler Settings

 Calibration

 Intrusion Alarm Settings

 Calibration

 Intrusion Alarm Processing

 Mong Direction

 Intrusion Movement

 Intruston Revenuest

 Intruston Revenuest

 Intruston Revenuest

 Detection Zone

 Dispect Counting

 Accel Protection

 Dispect Stopped

 Integer Parking

 Object Counting

 Crowel Detection

 Integer Plate Detector

 Please use mouse left button click to select points which define the zone.

 Image Stopped

 Integer Plate Detector

 Integer Plate Detector

Advanced users further can set more parameters for each analytics type.

'Enable analytics processing' should be checked and detection zone should be updated as per the requirement.

Update schedule for which analytics should be active from 'Scheduler settings' on this page.

Tweak parameters from 'Advanced settings' option available with every type of analytics module.

For more than one rule within the specific analytics module (e.g. Intrusion) – click

on button.



## 2.2 Video Devices - Sequences

This link displays the list of currently configured video sequences. A video sequence is a sequence of video channels, with dwell time specified for each channel. The video sequences can be used in the live view or playback view for patrol mode video display.

There are two modes for sequence display.

### 2.2.1 Video view mode

This shows playing video sequences with video and their dwell time.

	Security Management System - Server (User=admin,Privilege=Administrator) -
Image: wide wide wide wide wide wide wide wide	▲       ▶       Image: Sector
	Video devices - Sequences
	Page 01 of 01
Video devices	
Channels	SQ_AllCamera
Sequences	
SQ_AllCamera	
Audio devices	Calabor Water
Device groups	
Status	
Reports and Export	
Communication	
Security devices	
Keyboards and Joysticks	
Users and Privileges	
Alarm management	
Data management	
Remote backup Tasks	
Linked servers	
Server settings	
Video panorama	🚽 🔿 List view 💿 Video view 🔣 🚺 💶 🔁 🗾

The 'Add sequence' button ( or or on video window) can be used to configure a new video sequence. This will pop up a dialog box (see figure below) which allows you to name your video sequence, add description of video sequence and define or add video channels to video sequence with their dwell time.

Use user control available on dialog for adding video channel to the sequence, removing video channel from the sequence and changing video channel execution

order (Move up 1 and move down 4) buttons.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com

X

Add Sequence	100 4		100	
	Channel Group	: CG_AllChar	nnels	•
	Sequence Name		amera	
S	equence Descriptior		Sequence	
	Channel Name Channel Descriptior		2004) 2004)	WE WE ALL
	Dwell Time	4	seconds	. And the second
	Sequence Details	-		Video Channel Descrin
	Sequence Details Video Chann	video Cha	Dwell Time	Video Channel Descrip
	Sequence Details	video Cha		Video Channel Descrip Main Gate Entry Came South Gate Camera

After adding video sequence, application starts showing video sequence at the dialog.

0

You can add more sequence by repeating above steps.



### 2.2.2 List view mode

This link shows the list of video sequence, their name and description. You can add sequence, remove selected sequence or see details about the sequence using controls available on the page.

2	Security M	lanageme	ent System - Server	(User=admin,Privilege=Administrato	r) – 🗆
<b>&gt;&gt; &gt;&gt; &gt;&gt; &gt;&gt;</b>	_				V 14.07.11.0
192.168.0.64		leo device	s → Sequences		
New Office Building	🧷				
Video devices	^	<b>1</b>	<b>—</b>		
Channels		Sr No.	Sequence Name	Sequence Description	
Main Gate Entry		1	SQ_AllCamera	Camera Viewing Sequence 001	
South Gate					
Sequences					
SQ_AllCamera					
Audio devices					
Device groups					
Status					
Reports and Export					
Communication					
Security devices					
Keyboards and Joysticks					
Users and Privileges					
Alarm management					
Data management					
Remote backup					
Tasks		🖲 List vi	ew 🛛 Video viev	/	
Linked servers	¥				

The 'Remove sequence' button can be used to delete the currently selected video sequence.

The 'Detail' button **b** used to view the settings of the currently selected video sequence.

The 'Up' and 'Down' buttons can be used to change the sequence of the video sequences in the list.



### 2.2.3 Sequences details

The 'Sequences' link has sub-links, one for every video sequence configured in the system. Clicking on any of these sub-links displays the video sequence details page for that sequence. The sequence details page shows the list of video channels in that video sequence, along with their dwell times.

	Securi	ity Man	agem	ent System - Se	ver (User=admin	,Privilege=Ad	Iministrato	r) – 🗆 🗙
Image: select					*** ***	P		V 14.07.11.01
192.168.0.64	2	Video	device	es → Sequences	→ SQ_AllCamera			
New Office Building	2	Se	equenc	e Name:	SQ_AllCamera			
Video devices	^		-	e Description:	Camera Viewing	Cogueree 001		
Channels					-	Sequence 001		
Main Gate Entry		Ch	hannel	Group:	CG_AllChannels			
South Gate				Video Chann	Video Chann	D 11 7	141 01	
Sequences					VIDEO Chann VC_MainGate		Video Cha Main Gate	
SQ_AllCamera		2		South Gate	VC_SouthGate	10	South Gal	
Audio devices								00-2
Device groups								AV
Status								A
Reports and Export								Main Gate Entry
Communication								Main Gate Entry
Security devices								
Keyboards and Joysticks								
Users and Privileges								
Alarm management								
Data management		<					>	<b>↓</b>
Remote backup							,	
Tasks		1	<u>⁄</u>					
Linked servers	~							

Any row from the list can be selected, and the corresponding video channel is treated as the currently selected video channel. Live video is displayed for the currently selected video channel at right hand side.

The 'Up' and 'Down' buttons can be used to change the sequence of the video channels in the list, and hence in the video sequence.

The 'Edit sequence...' button can be used to edit the video sequence, this pops up same dialog box as that of add video sequence. You can change video sequence settings using user interface controls from this dialog.



## 2.3 Audio Device

This link displays list of currently added video devices. And lets you add audio devices.

Image: Solution of the set ings     Image: Solution of	Security	y Management System - Server	(User=admin,Privilege=Administ	rator) – 🗆
New Office Building     Video devices   Audio devices   Audio devices   > Channels   Device groups   Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Remote backup   Tasks   Linked servers   Server settings   Video panorama				V 14.07.11.0
Video devices   Audio devices   Audio devices   Channels   Device groups   Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Catamanagement   Data management   Catamanagement   Server settings	192.168.0.64 🧨	Audio devices → Channels		
Audio devices   Channels   Device groups   Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Remote backup   Tasks   Linked servers   Server settings	New Office Building 🧳			
Channels   Device groups   Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Tasks   Linked servers   Server settings   Video panorama	Video devices	📌 🖭 🗶 🦞 🦞	0	
Device groups   Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Tasks   Linked servers   Server settings   Video panorama	Audio devices	Sr No. Channel Name (	Channel ID Description	Parameter1
Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Remote backup   Tasks   Linked servers   Server settings   Video panorama	▶ Channels			
Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Data management   Tasks   Linked servers   Server settings   Video panorama	Device groups			
Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Tasks   Linked servers   Server settings   Video panorama	Status			
Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Remote backup   Tasks   Linked servers   Server settings   Video panorama	Reports and Export			
Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Remote backup   Tasks   Linked servers   Server settings   Video panorama	Communication			
Users and Privileges Alarm management Data management Remote backup Tasks Linked servers Server settings Video panorama	Security devices			
Alarm management Data management Remote backup Tasks Linked servers Server settings Video panorama	Keyboards and Joysticks			
Data management   Remote backup   Tasks   Linked servers   Server settings   Video panorama	Users and Privileges			
Remote backup   Tasks   Linked servers   Server settings   Video panorama	Alarm management			
Tasks Linked servers Server settings Video panorama				
Linked servers Server settings Video panorama				
Server settings Video panorama				
Video panorama				
		<		>
User interface settings				
	User interface settings			

Use 'Add video device...' <sup>the button</sup> to add video device to the system.

Add audio device ×					
Channel name: Channel ID: Channel description: Audio source type:	Add audio device          Audio Parking Entrance         AD_       AudioParkingEntrance         Audio Parking Entrance description         Microphone (2- High Definition	×			
	<b>₽</b>				
SmartVMS <sup>™</sup> Secu	rity Management System Server – User Guide				

www.smart-vms.com



Enter details for audio device name and desciption and select audio source type from list.

Click on 'Add' button to add audio device to system.

This will popup recording selection dialog for audio device, configure recording

settings for audio device and click 'Save' button to save settings.

Recording settings - Au	udio Parking En	trance	×
Channel details Channel name: AD_AudioParkingEntrance Channel description: Audio Parking Entrance description Device name: Microphone (2- High Definition Recording drive: D:\			))
Recording mode  Continuous O No recording	○ Rule based	Scheduled Y	
Recording schedule settings Scheduled record	ding is disabled		

The 'Remove selected audio device **K** button can be used to delete the currently selected audio device.

The 'View audio device details' button **be** can be used to view the settings of the currently selected audio device.

The 'Up' and 'Down' buttons can be used to change the sequence of the video sequences in the list.



Use button to play audio from all channels, audio will start only for those for which audio has been enabled during addition/editing video channel.

Use **W** button to mute audio from all channels.



## 2.4 Device Groups

### **2.3.1 Groups**

The 'Device Groups' link lists all video devices and audio devices groups currently defined in the system. By default system adds 'CG\_AllChannels" group which includes all the video devices and audio devices from the system. You can define device groups as per your need.

S	ecurity M	anagem	nent System - Server (User	=admin,Privilege=Administrator)		- 🗆 🗙
▶ 🐼				i / / / / / / / / / / / / / / / / / / /		14.07.11.01
192.168.0.64		ice grou	ups → Groups			
New Office Building	2		D			
Video devices	^	T	8== 🗡			
Audio devices		Sr No.	Device Group Name	Device Group Description		
Device groups		1	CG_AllChannels	All Channels		
▶ Groups						
CG_AllChannels						
Status						
Reports and Export						
Communication						
Security devices						
Keyboards and Joysticks						
Users and Privileges						
Alarm management						
Data management						
Remote backup						
Tasks						
Linked servers						
Server settings					,	
Video panorama						
User interface settings	×					

The 'Add new device group' button can be used to add new group to the system. This will pop up a dialog box (see figure below) which allows you to name your group, add description of group and define or add video channels and audio devices to group.

The 'Remove group' **M** button can be used to delete the currently selected group.

The 'Detail' button **be** can be used to view the details of the currently selected group.

	Add Can	nera (	Group	×			
Group name: Group descriptio	Group name:CG_Group001Group description:Device Group 001						
Devices in group	)						
Device name	Devic	e t	Device description				
Main Gate Entr	y Video		Main Gate Entry Ca				
South Gate	Video		South Gate Camera				
Audio Parking E	Entry Audio		Audio Parking Entry				
Devices not in g	roup		A V 🕯				
Device name	Device t	Devi	ice description				
				_			
				-			
Exclusive dev	ice selection	1		_			
		0					

Use

- To remove all devices from the group.
- To remove selected devices from the group.
- To add all video devices to the group.
- To add selected devices from 'Devices not in group' to 'Devices in group'

Use 'Exclusive device selection' to exclude all the devices from 'Devices not in group' list which are already used in one or more device groups.

Click on 'Save' button to complete adding group to the system.

### 2.3.2 Group Details

The 'Group' link has sub-links, one for every group configured in the system. Clicking on any of these sub-links displays the details about that group. This details page shows all the video channels that are available in the group and all the video

channels that are not in the group. Click on 'Edit camera group settings...' **button** to change the settings. Change the 'Channels in group' list with the buttons

below it. After changes completed, click on 'Save camera group settings' button to save the changes.

S	ecurity Management System	- Server (User=adr	nin,Privilege=Administrator)	- 🗆 🗙
<b>&gt;&gt;</b>			P b 1	V 14.07.11.01
192.168.0.64	Pevice groups → Groups	→ CG_AllGateCame	eras	
New Office Building	2			
Video devices	Group Name:	CG_AllGateCamer	as	2
Audio devices	Group Description:	All Gate Cameras		
Device groups	Group Description.	All Gate Califeras		<b>.</b>
Groups	_ · ·			0
CG_AllChannels	Devices in group			
CG_AllGateCameras	Device name	Device type	Device description	
Status	Main Gate Entry South Gate	Video Video	Main Gate Entry Camera South Gate Camera	
Reports and Export	Audio Parking Entry		Audio Parking Entry	
Communication				
Security devices				
Keyboards and Joysticks				
Users and Privileges	Devices not in group			
Alarm management	Device name	Device type	Device description	
Data management	Device name	Device type	Device description	
Remote backup				
Tasks				
Linked servers				
Server settings				
Video panorama	Exclusive device s	election		

Figure – Group details link for 'CG AllGateCameras' group.



## 2.4 Status

The status link gives category wise quick status of the entire system. It has sub links.

### 2.4.1 Channel status

This link displays status for all configured video channels with details on each stream used and its current status. Summary which includes total cameras, total online cameras and total offline cameras is displayed at the bottom of the page.

Use 'Refresh' button **status** to get current channel status at any time.

Use 'Save' button to save channel status report to standard format like text, xml, or CSV format.

Secu	irity Managem	ent System - Serv	er (User=admin,Priv	vilege=Administrate	or)	_ =
▶ 😵 📽 ▲ ▲			🥸 🗾	<u></u>		V 14.07.11.01
192.168.0.64	Status → Ch	annel status				• • • • • • • • • • • • • • • • • • • •
New Office Building						
Video devices	Video ch	annel status:			1	3
Audio devices	Sr No.	Channel Name	Parameter1	Display stream 1	Display stream 2	F
Device groups	1	Main Gate Entry	E:\SampleMedia\	Online	Not used	Г
Status	2	South Gate	E:\SampleMedia\	Online	Not used	P
Channel status						
Recording status						
Video analytics status						
Bandwidth status						
Storage space						
Video parameters						
Camera parameters						
Connected clients						
Phone Communication						
Reports and Export	<					>
Communication	Total car	meras: 2				
Security devices	Online c	ameras: 2 ameras: 0				
Keyboards and Joysticks		offline cameras: 0				
Users and Privileges						
Alarm management 🗸						



### 2.4.2 Recording status

This link displays recording mode used for all configured video channels in the system with recording drive used per video channel.

<ul><li>▶</li><li>♦</li><li>♦</li><li>♦</li></ul>	_		rer (User=admin,P	rivilege=Administra		14.07.11.01
192.168.0.64		Recording status				
New Office Building	2					
Video devices	^ Video	recording status:			S 🔁	
Audio devices	Sr No	. Channel Name	Parameter1	Recording Mode	Recording Status	
Device groups	1	Main Gate Entry	E:\SampleMed		Recording	
Status	2	South Gate	E:\SampleMed	Continuous	Recording	_
Channel status						
Recording status						
Video analytics status						_
Bandwidth status						
Storage space						
Video parameters						-
Camera parameters						-
Connected clients						
Phone Communication						
Reports and Export						
Communication						
Security devices	<					
Keyboards and Joysticks						
Users and Privileges		2				
Alarm management	~					

Use button to save this report to text, xml or CSV format.

Use button to update recording plan for selected video channel.

Use button to reassign recording drives for all configured video channels in the system. The application intelligently re-assigns recording drives for all channels, to distribute the recording load. Please note that changing recording drive for a camera will result in loss of previously recorded data. Hence this button should be used carefully and is recommended to be used only during the initial configuration steps.

Use

button to refresh the recording of all video channels.



### 2.4.3 Video analytics status

This link displays the list of currently configured video channels and their video analytics status – whether video analytics in ON/OFF, details regarding status of features like Intrusion status, Line Crossing status, Wrong direction movement status etc.

▶ 🐼 😵	-			<ul><li>✓ 100 min</li><li>✓ 100 min</li></ul>			<u>ک</u>	1	V 14.03
92.168.0.64	2 9	Status -	Video analy	tics status					
ew Office Building	1								
/ideo devices	^	Video	anlytics sta	tus for all chann	els:				
Audio devices		No.	Channel	Channel ID	F	Processing	Intrusion	Line crossing	Wrong (
Device groups				VC_MainGat			Disabled	Disabled	Disabled
Status			South Gate	VC_SouthGa	E	Off	Disabled	Disabled	Disable
Channel status									
Recording status									
Video analytics status									
Bandwidth status									
Storage space									
Video parameters									
Camera parameters									
Connected clients									
Phone Communication									
Reports and Export									
Communication									
Security devices		<							>
Ceyboards and Joysticks									'
Jsers and Privileges			1						

Use button to status report to standard format like text, xml or CSV.

Use button to edit video analytics for selected video channel. Details on how to configure video analytics are discussed above.



### 2.4.4 Bandwidth status

This link displays bandwidth consumed by each configured stream for all video configured video channels.

<ul> <li>▶</li> <li>♦</li> <li>♦</li> <li>♦</li> </ul>				() ()	<b>5</b>	<u> </u>		V 14.07.
192.168.0.64	🧨 Statu	s → Ba	ndwidth status					
New Office Building	2							
Video devices	^ Ne	etwork	bandwidth usag	e for	all channels:			3
Audio devices	9	Sr No.	Channel Name	P	Display Strea	Display Strea	Recording Str	Analyti
Device groups		_	Main Gate En	E		0 Kbps	0 Kbps	0 Kbps
Status	2	2	South Gate	E	53946 Kbps	0 Kbps	0 Kbps	0 Kbps
Channel status								
Recording status								
Video analytics status								
Bandwidth status								
Storage space								
Video parameters								
Camera parameters								
Connected clients								
Phone Communication								
Reports and Export								
Communication	<							>
Security devices								
Keyboards and Joysticks					Total netwo	rk bandwidth usa	ge: 80919.00 Kbp	S
Users and Privileges								

Use button to status report to standard format like text, xml or CSV.

Use 'Refresh' button is to get current bandwidth status at any time.



### 2.4.5 Storage space

This link lets you to check storage space utilization for particular minute by particular video channel.

Select video channel of your interest, timestamp of your choice and click on 'View

storage space utilization' button to know storage space used in mega-bytes (MB).

Image: Solution of the status   Status   Channel status   Ndeo devices   Audio devices   Audio devices   Audio devices   Audio devices   Status   Channel status   Status   Channel status   Nideo analytics status   Bandwidth status   Storage space   Video parameters   Connected dients   Phone Communication   Reports and Export   Connected dients   Phone Communication   Security devices   Aution divices   Aution divices   Nideo parameters   Connected dients   Phone Communication   Reports and Export   Connected dients   Phone Communication   Security devices   Aution divices   Devices   Aution divices   Connected dients   Phone Communication   Reports and Export   Connected dients   Phone Communication   Reports and Export   Connected dients   Phone Communication   Reports and Privileges   Alarm management	Secu	urity Management System - Se	rver (User=admin,Privilege=Administrator)	_ 🗆 🗙
New Office Building   Video devices   Audio devices   Audio devices   Device groups   Status   Channel status   Recording status   Video analytics status   Bandwidth status   Storage space   Video parameters   Connected clients   Phone Communication   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges	<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li></ul>			V 14.07.11.01
Video devices   Audio devices   Device groups   Status   Channel status   Recording status   Video analytics status   Bandwidth status   Storage space   Video parameters   Camera parameters   Connected clients   Phone Communication   Security devices   Keyboards and Joysticks   Users and Privileges	192.168.0.64 🧨	Status → Storage space		
Video devices       Audio devices         Audio devices       From         Device groups       7/18/2014 v         Status       To         Channel status       To         Recording status       Video analytics status         Video parameters       Video parameters         Connected clients       Phone Communication         Reports and Export       Communication         Security devices       Keyboards and Joysticks         Users and Privileges       Vienes	New Office Building 🧳	Channel name:	Main Cata Fata	
Device groups       7/18/2014 v 15:49:17 *         Status       7/18/2014 v 15:49:17 *         Channel status       ************************************	Video devices			
Status       Channel status         Recording status       Image: Control of the status         Video analytics status       Image: Control of the status         Storage space       Video parameters         Connected clients       Image: Control of the status         Phone Communication       Image: Control of the status         Reports and Export       Image: Communication         Security devices       Image: Control of the status         Keyboards and Joysticks       Image: Control of the status         Users and Privileges       Image: Control of the status	Audio devices	From	7/18/2014 ¥ 15:18:17 🔹	
Status       Channel status         Recording status       Image: Control of the status         Video analytics status       Image: Control of the status         Storage space       Video parameters         Connected clients       Image: Control of the status         Phone Communication       Image: Control of the status         Reports and Export       Image: Communication         Security devices       Image: Control of the status         Keyboards and Joysticks       Image: Control of the status         Users and Privileges       Image: Control of the status	Device groups	То	7/18/2014 ¥ 15:49:17	
Recording status   Video analytics status   Bandwidth status   Storage space   Video parameters   Camera parameters   Connected clients   Phone Communication   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges	Status	10		
Video analytics status         Bandwidth status         Storage space         Video parameters         Camera parameters         Connected clients         Phone Communication         Reports and Export         Communication         Security devices         Keyboards and Joysticks         Users and Privileges	Channel status		<b>3</b>	
Bandwidth status Storage space Video parameters Camera parameters Connected clients Phone Communication Reports and Export Communication Security devices Keyboards and Joysticks Users and Privileges	Recording status			
Storage space       Video parameters         Video parameters       Image: Storage space         Connected clients       Image: Storage space         Phone Communication       Image: Storage space         Reports and Export       Image: Storage space         Communication       Image: Storage space         Security devices       Image: Storage space         Keyboards and Joysticks       Image: Storage space         Users and Privileges       Image: Storage space	Video analytics status	Y Axis-Storage	Space(MB) X Axis-Time(DD/MM:XXX)	
Video parameters         Camera parameters         Connected clients         Phone Communication         Reports and Export         Communication         Security devices         Keyboards and Joysticks         Users and Privileges	Bandwidth status	<sup>24</sup> <b>T</b>		
Camera parameters Connected clients Phone Communication Reports and Export Communication Security devices Keyboards and Joysticks Users and Privileges	Storage space	19 🚽		
Connected clients       P       V	Video parameters			
Phone Communication     07/10     16.24     16.30     16.42     07/18       Reports and Export     07/10     16.24     16.30     16.42     07/18       Communication     15.10     16.24     16.30     16.42     07/18       Security devices     Image: Communication     Image: Communication     Image: Communication       Keyboards and Joysticks     Image: Communication     Image: Communication       Users and Privileges     Image: Communication     Image: Communication	Camera parameters		and here and here and	
Reports and Export     07/18     15.24     15.30     15.42     07/18       Communication     15.11     15.41     15.40     15.40       Security devices     Image: Communication of the temperature of t	Connected clients	9 🛨		
Communication       Security devices       Keyboards and Joysticks       Users and Privileges	Phone Communication	4	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
Security devices Keyboards and Joysticks Users and Privileges	Reports and Export	15.18		
Keyboards and Joysticks Users and Privileges	Communication			
Users and Privileges				
	Keyboards and Joysticks			
Alarm management v	Users and Privileges	<b>(==</b> )		
	Alarm management v			

Use buuton to view storage space utilization for next slot in time.

Use buuton to view storage space utilization for previous slot in time.

### 2.4.6 Video parameters

Select video source type from available options and click on 'View button' button to list video stream parameters for all cameras of selected type. Parameter includes video resolutions, frame rates, bit rates, quality etc. for various stream inside the cameras.

The list adds more columns to show these settings.

You can save this report to standard formats using 'Save report' **button**.

Use 'Abort' button - to abort viewing video channel parameters.

Sec	curity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li></ul>		V 14.07.11.01
192.168.0.64 🧳	Status – Video parameters	
New Office Building 🥖		
Video devices	Video source type:	
Audio devices		
Device groups		
Status	Sr No. Channel Name Parameter1 Status	
Channel status		
Recording status		
Video analytics status		
Bandwidth status		
Storage space		
Video parameters		
Camera parameters		
Connected clients		
Phone Communication	No camera selected.	
Reports and Export		
Communication		
Security devices		
Keyboards and Joysticks		
Users and Privileges		
Alarm management		

### 2.4.7 Camera Parameters

This link displays camera parameters for all cameras added in system. Parameters includes details of each stream, Y-Flip, Camera PTZ, Video analytics status, motion detection and audio settings etc.

Se Se Se Se Se Se	ecurity Management Syste	m - Sei	ver (User=admin	,Privilege=Administrator)		4.07.11.0
192.168.0.64	Status - Camera par	ameter	s		• •	4.07.11.0
New Office Building	2					
Video devices	<ul> <li>Camera paramet</li> </ul>	ers:			<u></u>	
Audio devices	Channel Name	I Dis	play Stream1	Display Stream2	Recording Stream	
Device groups	Main Gate En		nfigured	Single stream camera	Single stream can	
Status	South Gate	I Co	nfigured	Single stream camera	Single stream can	
Channel status						
Recording status						
Video analytics status						
Bandwidth status						
Storage space						
Video parameters						
Camera parameters						
Connected clients						
Phone Communication						
Reports and Export						
Communication						
Security devices						
Keyboards and Joysticks	<				>	
Users and Privileges						
Alarm management	✓					



### 2.4.8 Connected clients

This link displays network connections done by client applications to this server. It lists connections in detail with client's IP address, description (reason for connection), channel ID used, and status of the connection.

Use 'Save report' button **button** to save the status. Use 'Refresh' button to view current status at any given time. \_ 🗆 🗙 Security Management System - Server (User=admin,Privilege=Administrator) 0 • **?** 6 (A) 0 V 14.07.11.01 192.168.0.64 1 Status - Connected clients New Office Building ð Connected client(s) information: /ideo device Audio devices Sr No. Client IP address Description Channel ID Status Normal connections 0 1 Device groups Status Channel status **Recording status** Video analytics status **Bandwidth status** Storage space Video parameters **Camera parameters** Connected clients Phone Communication Reports and Export Communication Security devices < 5 Keyboards and Joysticks Users and Privileges H Alarm management



## 2.4.9 Phone communication

This page displays phone communication status with android application, please refer to 'Communication->Phone settings' for more information.

	Security	Managem	ent System - Serve	r (User=admin,Priv	ilege=Administra	itor)	_ □
▶ < < < < >>	_			100 III III IIII IIII IIIII IIIIIIIIIII	<u></u>	1	V 14.07.11.01
192.168.0.64	🥐 S	tatus → Ph	one Communication	1			
Site_645A04A3DF13	1						
Video devices	^						8
Audio devices		Sr	Request Time	Request Type	Phone Number	Status	
Device groups							
Status							
Channel status							
Recording status							
Video analytics status							
Bandwidth status							
Storage space							
Video parameters							
Camera parameters							
Connected clients							
Phone Communication							
Reports and Export		Not con	nected to smartpho	ne			
Communication							
Security devices							
Keyboards and Joysticks							
Users and Privileges							
Alarm management	~						

## 2.5 Reports and Export

Using this link you can configure alarm reports and default video export settings (used in case of exporting videos directly using right click options available on video window).

### 2.5.1 Alarms

Check 'Enable daily reports' option and configure time, report format, and option to save report to predefined storage path (local storage or network attached storage or any other storage media accessible to server computer) or email report as an attachment to default or other email IDs.

Secu	rity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li></ul>		V 14.07.11.01
192.168.0.64 🧨	Reports and Export → Alarms	1
New Office Building 🧳		
Video devices	✓ Enable daily reports	17
Audio devices		
Device groups	Time: O V Hours Every Day	
Status	Report File Format: CSV File 🗸	0
Reports and Export	<ul> <li>Save report to file</li> </ul>	
▶ Alarms	Path: E:\DailyAlarmReports	
Default video export setting	E-mail report as attachment	
Communication	Use default e-mail ID(s)	
Security devices	Other e-mail ID(s)	
Keyboards and Joysticks	To;	
Users and Privileges	CC:	
Alarm management		
Data management		
Remote backup		
Tasks		
Linked servers		
Server settings		
Video panorama		
User interface settings 🗸 🗸		

Please note: For sending email as an attachment, you **must** configure email settings from 'Communication-> Email' tab with correct user name, password, and other server settings. Also please confirm that 'Test email' button at 'Communication->Email' tab works and you get email delivered at configured address.



### 2.5.2 Default video export settings

Configure default settings for exporting videos. These settings will be used when user exports videos from right click video options (single video export or multiple video exports).

Configure export path, export format, watermarking option, watermarking color, text to be written on exported video, text font, channel name watermarking, and timestamp watermarking etc.

You can also enable password protection for exporting videos in native format.

You can also check 'Use specified file name for exported videos' to enable providing exported video file name instead of using default file name.

Secu	rity Management System - Server (User=admin,Privilege=Administrator) – 🗖
▶ 😵 🐲 ३३ ३४	
192.168.0.64	Reports and Export – Default video export settings
New Office Building 📝	
Video devices	Export path: E:\ExportedVideos\
Device groups	Export format: WMV-High Quality v
Status	
Reports and Export	Enable watermarking
Alarms	Text color:
Default video export setting	✓ Text Text
Communication	Vertical spacing: 20 pixels
Security devices	
Keyboards and Joysticks	Channel name
Users and Privileges	✓ Video timestamp
Alarm management	
Data management	Enable password protection for native export
Remote backup	Username: admin
Tasks	Password:
Linked servers	
Server settings	✓ User specified file name for exported video
Video panorama	
User interface settings v	



### 2.6 Communication

This link lets you to configure various communication parameters that server application will be using while communicating with other devices, software's etc.

### 2.6.1 Network

You can configure network parameters to be used by the server application.

Image: Solution   Size   Audio devices   Audio devices   Audio devices   Status   Status   Status   Communication   Ports   Communication   Ports   TCP port I:   Stole streaming   Restrictions   RSS Feed settings   FTP port (UDP):   20001   HTTP port (CP):   102001   HTTP port (CP):   9900   Web address:   http://192.168.0.64:9900		Security Management System - Server (Use	er=admin,Privilege=Administrator)	- 🗆 🗙
Site_645A04A3DF13   Video devices   Audio devices   Device groups   Status   Communication   Network   Email settings   Prots   TCP port (TCP):   1024   Video streaming   RSS Feed settings   External Database   Security devices   Keyboards and Doysticks   Users and Privileges   Aarm management	▶ 🔇 📽			V 14.07.11.01
Video devices   Audio devices   Device groups   Status   Reports and Export   Communication   Network   Email settings   Phone settings   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	192.168.0.64			1
Audio devices   Device groups   Status   Communication   I Network   Email settings   Phone settings   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	Site_645A04A3DF13	Input IP address (Connect	ions to cameras)	
Audio devices   Device groups   Status   Communication   I Network   Email settings   Phone settings   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	Video devices	Current: 192.1	68.0.64	2
Device groups   Status   Current:   192.168.0.64   Communication   Network   Email settings   Phone settings   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	Audio devices	Select: 192	168.0.64	
Reports and Export   Communication   Network   Email settings   Phone settings   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	Device groups			<b>Ind</b>
Communication   Network   Email settings   Phone settings   FTP settings   TCP port1:   S500   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	Status	Output IP address (Client	connections)	0
Select: 192.168.0.64   Ports   Ports   TCP port1:   S500   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management     Select:     192.168.0.64      Ports TCP port (TCP): 1024 RTSP port (UDP): 20000 RtCP port (UDP): 20001 HTTP port (UDP): 9900 Web address: http://192.168.0.64:9900	Reports and Export	Current: 192.1	68.0.64	
Network   Email settings   Phone settings   Phone settings   TCP port1:   5500   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	Communication	Select: 192	168.0.64	
Phone settings   FTP settings   FTP settings   Video streaming   Restrictions   RSS Feed settings   External Database   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management	Network	192.	100.0.04	
FTP settings       RTSP port (TCP):       1024         Video streaming       RTSP port (TCP):       20000         Restrictions       RTCP port (UDP):       20001         RSS Feed settings       HTTP port (TCP):       9900         Security devices       Web address:       http://192.168.0.64:9900         Visers and Privileges       Alarm management       Filter State	Email settings	Ports		
Video streaming       RTP port (ICP):       20000         RSS Feed settings       RTCP port (UDP):       20001         External Database       HTTP port (TCP):       9900         Security devices       Web address:       http://192.168.0.64:9900         Visers and Privileges       Kisers       Kisers	Phone settings	TCP port1: 5500	D	
Restrictions       RTP port (UDP):       20000         RSS Feed settings       RTCP port (UDP):       20001         External Database       HTTP port (TCP):       9900         Security devices       Web address:       http://192.168.0.64:9900         Keyboards and Joysticks       Image: Comparison of the security devices       Image: Comparison of the security devices         Users and Privileges       Alarm management       Image: Comparison of the security devices	FTP settings	RTSP port (TCP): 1024	4	
Restrictions       RTCP port (UDP):       20001         RTCP port (UDP):       20001         External Database       HTTP port (TCP):       9900         Security devices       Web address:       http://192.168.0.64:9900         Keyboards and Joysticks       Image: Comparison of the port (CDP) image: Comparison of the port (CD	Video streaming	BTP port (UDP): 2000	00	
RSS Feed settings     Hitch perc (corr)       External Database     HTTP port (TCP): 9900       Security devices     Web address: http://192.168.0.64:9900       Keyboards and Joysticks     Image: http://192.168.0.64:9900       Users and Privileges     Image: http://192.168.0.64:9900       Alarm management     Image: http://image: http://	Restrictions			
Security devices     Web address: http://192.168.0.64:9900       Keyboards and Privileges     Keyboards       Alarm management     Keyboards	RSS Feed settings			
Keyboards and Joysticks       Users and Privileges       Alarm management	External Database	HTTP port (TCP): 9900	D	
Users and Privileges Stars and Privileges	Security devices	Web address: http	://192.168.0.64:9900	
Alarm management	Keyboards and Joysticks			
Data management v	Alarm management			
	Data management	×		

Application can use two different IP addresses for communication purpose.

'Input IP address (Connections to cameras)' will be used for communication with the cameras.

'Output IP address (Client Connections)' will be used for communication with client applications.

These IP addresses can be same or different as per the requirement.

Ports listed in this page will be used by the application for communication. **Please** make sure these ports are free and not already consumed by any other software or service running on the server computer.

'Reset communication' button we can be used in case you observe any issues while connecting client applications to this server. This may happen in rare cases where network is having stability issues. This button is to quickly rectify such error conditions.



Use 'Web address' if you wish to use web client. VLC plug-in is required to view videos using web clients to this application.



### 2.6.2 Email settings

From e-mail tab, you should configure the e-mail account settings that this application will use to send an e-mail when it learns particular alarm. E-mail settings includes SMTP server, valid e-mail account, security type (none, SSL, TLS), SMTP port number etc.

Click on "Edit" button to enable user controls.

Change parameters and click on "Save" button

Sec	urity Management System - Server	(User=admin,Privilege=Administrator)	- 🗆 🗙
► Solution ► Soluti			V 14.07.11.01
192.168.0.64	Communication → Email settings		
Site_645A04A3DF13			
Video devices	SMTP Server:	smtp.gmail.com	2
Audio devices	SMTP Server Port No:	587	
Device groups	Con with Tunor		<b>.</b>
Status	Security Type:	TLS V	0
Reports and Export	Sender Name:	UserName	V
Communication	Sender E-mail ID:	youremailaddress@gmail.com	
Network	✓ Use authentication	you chandau coolegnameon	
🕨 Email settings	✓ Use authentication Password:		
Phone settings	Password:		
FTP settings	Confirm Password:	•••••	
Video streaming	Default recipient E-mail ID:	defaultRecipientTo@yourserver.com	
Restrictions		defaultRecipientCC@yourserver.com	
RSS Feed settings	CC E-mail to:	derautterprencec@yourserver.com	
External Database			
Security devices			
Keyboards and Joysticks			
Users and Privileges			
Alarm management			
Data management 🗸			

Above screenshot can be referred for setting up GMAIL account for sending emails from this server application. Please note that 'Sender E-mail ID 'and passwords should match to the account you are configuring (Gmail account in this example). Also default recipient Email ID and CC Email IDs should be valid Ids.

# Settings for other SMTP severs may change. Please contact email server provider to get these details.

It is strongly recommended that you click 'Send test Email' button to check whether you get test email to configured default Email and CC ID. Check the recipients email box for confirmation.



### 2.6.3 Phone Settings

From phone settings tab, you should configure the phone communication settings that this application will use to make a call and SMS when it learns particular alarm. Phone communication settings includes IP Address, Port Number, Default Phone Number (Call), Default Phone Number (SMS) etc.

Click on "Edit" button to enable user controls.

Change parameters and click on "Save" button

Se	curity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
▶ 🔗		V 14.07.11.01
192.168.0.64	Communication – Phone settings	
Video devices	IP Address: 192.168.0.68	1
Audio devices	Port Number: 5800	
Device groups	Default Phone Number(Call): 123456789	
Status Reports and Export	Default Phone Number(SMS): 123456789	0
Communication		
Network		
Email settings		
Phone settings		
FTP settings		
Video streaming		
Restrictions		
RSS Feed settings		
External Database		
Security devices		
Keyboards and Joysticks		
Users and Privileges		
Alarm management		
Data management	×	

In order to use this application you need to install android based 'Phone Network Gateway Application' on your phone.

Please use 'Test Call' and 'Test SMS' is to make sure that the configuration is correct and you are able to receive the phone call and SMS.



#### 2.6.4 FTP Settings

From FTP settings tab, you should configure the FTP communication settings that will be used by application to upload alarm details on give FTP server and directory. FTP settings includes Server Name, Port Number, Username, Password, Directory etc.

Click on "Edit" button it to enable user controls.

Change parameters and click on "Save" button

	Security Management System - Se	erver (User=admin,Privilege=Administrator)	- 🗆 🗙
<ul><li>▶</li><li>♦</li><li>♦</li><li>♦</li><li>♦</li></ul>			V 14.07.11.01
192.168.0.64	Communication → FTP setti	ngs	
Site_645A04A3DF13	2		
Video devices	Server Name:	ftp.yourdomain.com	2
Audio devices	Port Number:	21	×
Device groups	Username:	ırUserName	
Status	Password:		0
Reports and Export		•••••	
Communication	Directory:	\\SMSAlarms	
Network			
Email settings	FTP		
Phone settings			
FTP settings			
Video streaming			
Restrictions			
RSS Feed settings			
External Database			
Security devices			
Keyboards and Joysticks			
Users and Privileges			
Alarm management			
Data management	✓		

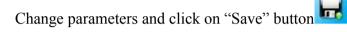
Please use 'Test FTP Upload' 💷 button validated the settings.

### 2.6.5 Video Streaming

You can configure video stream resolutions that this server application will use when streaming data to clients running on devices like mobile phones.

Please select values from the available options. These will be approximate values. Server application will adjust them as per video channel parameters while streaming data to client applications.

Click on "Edit" button to enable user controls.



Sec	urity Management System - Server (User=admin,Privilege=Administrator) – 🗖 💌
<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li>&lt;</ul>	
192.168.0.64	Communication – Video streaming
Site_645A04A3DF13	
Video devices	Low resolution stream: Approx 80X60 V
Audio devices	
Device groups	Medium resolution stream: Approx 320X240 V
Status	0
Reports and Export	
Communication	
Network	
Email settings	
Phone settings	
FTP settings	
Video streaming	
Restrictions	
RSS Feed settings	
External Database	
Security devices	
Keyboards and Joysticks	
Users and Privileges	
Alarm management	
Data management 🗸	

### **2.6.7 Restrictions**

From this link, you can set the restrictions on number of client (PC, Web and mobile client) that can be connected to system simultaneously.

Click on "Edit" button to enable user controls.

Change parameters and click on "Save" button

	Security M	lanagement System - Serve	r (User=admin,l	Privilege=Adm	inistrator)	
▶ 😚 😴	_			License	information	Y 14.07.11.01
192.168.0.64	🧷 Co	mmunication → Restrictions				
Site_645A04A3DF13	2			Allowed	Connected	
Video devices	~			, morred		2
Audio devices		PC client connections:		-1	0	<u> </u>
Device groups		PC client - video connection	s:	-1	0	<b>.</b>
Status		Web client - video connectio	ins:	-1	0	
Reports and Export		Mobile phone client - video	connections:	-1	0	0
Communication						
Network						
Email settings						
Phone settings						
FTP settings						
Video streaming		Status: All conne	ections	v		<u> </u>
Restrictions						
RSS Feed settings		Sr No. Client IP address	Туре		Description	
External Database		No connection				
Security devices						
Keyboards and Joysticks						
Users and Privileges						
Alarm management						
Data management	~					



### 2.6.8 RSS Feed Settings

From this link you can view and change RSS feed settings for application. Application can publish all alarms to 'RSS Feed URL' displayed on settings page.

Click on "Edit" button to enable user controls.

Change parameters and click on "Save" button

S	ecurity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
Image: second		V 14.07.11.01
192.168.0.64	Communication – RSS Feed settings	
Site_645A04A3DF13	2	
Video devices	Active alarms RSS feed configuration	2
Audio devices	RSS Feed URL: http://192.168.0.64:9900/rss/activealarms	
Device groups	Active Alarms: Recently generated alarms	<b>.</b>
Status	Duration: Last 5 Minutes	0
Reports and Export		
Communication		
Network		
Email settings		
Phone settings		
FTP settings		
Video streaming		
Restrictions		
RSS Feed settings		
External Database		
Security devices		
Keyboards and Joysticks		
Users and Privileges		
Alarm management		
Data management	✓	

The 'Active alarms' can be defined from the same settings page. Options available for the 'Active Alarms' configuration are -

**Recently generated alarms** – selecting this option adds all 'recent' alarms to the RSS feed

**Non-acknowledged alarms** – selecting this option adds alarms available in the 'Security Management System' which are waiting for acknowledgement when the active alarms RSS feed is queries.

If 'Recently generated alarms' option is selected for 'Active alarms', it is possible to define 'Duration' which defines 'recent' interval. Several options are available for 'Duration' – from 'Last 5 minutes' to 'Last 7 days'.

### 2.6.9 External Database

From this link you can change settings for external database connection for application. Application will use this settings to add 'Object counting logs' to external database.

Currently Security Management System supports MySQL database, as an external database.

External database connection settings includes server IP address or name, port number, database name, username and password

Click on "Edit" button to enable user controls.

Change parameters and click on "Save" button

Sec	urity Management System - Server	(User=admin,Privilege=Administrator)	- 🗆 🗙
<b>b</b>			V 14.07.11.01
192.168.0.64 🧳	Communication → External Datab	base	
Site_645A04A3DF13	Server IP / Domain Name :	127.0.0.1	2
Audio devices	Port Number:	3306	<u> </u>
Device groups	Database Name:	test	
Status	Username:	root	0
Reports and Export	Password:	••••	
Communication	Fassword.		
Network			
Email settings			
Phone settings			
FTP settings			
Video streaming			
Restrictions			
RSS Feed settings			
External Database			
Security devices			
Keyboards and Joysticks			
Users and Privileges			
Alarm management			
Data management	,		

Please use 'Test External Database Connection' to test connection with database.

## 2.7 Security devices

### 2.7.1 Devices

This link displays the list of currently configured security devices. Also you can configure new security devices from this page.

Security Management System - Server (User=admin,Privilege=Administrator)				
	Add Security Device	×		
192.168.0.58	Device Name: SD_ Bldg1_AccessControl			
Site_207C8F1117F4	Device Description: Access control system - Bldg1			
Video devices	Device Type: Access controls	•		
Channel groups	Sr No			
Status	Input Signal Type: TCP			
Reports and Export	IP Address: 192.168.1.122			
Communication				
Security devices	Port Number: 1024			
Devices				
Keyboards and Joysticks				
Users and Privileges				
Alarm management				
Data management				
Tasks				
Failover recording				
Server computer settings				
Video panorama	J ()			
User interface settings				

The 'Add device' button ican be used to configure a new security device.

Any row from the list can be selected, and the corresponding device is treated as the currently selected device.

The 'Remove' button *E* can be used to delete the currently selected device.

The 'Detail' button **b** can be used to view the settings of the currently selected device.



### 2.7.2 Device Alarms

This page will display all the alarms that will be generated by security devices supported by 'Security Management System'.

▶ 🔗 📽 & 💰			<b>.</b>	<u>&gt;</u>	V 14.07.	.11.0
192.168.0.64	Security de	vices → Device Alarms				
Site_645A04A3DF13						
Video devices	2					
Audio devices	Sr No.	Alarm Name	Category	Alarm acknowledgement	Acknowledgement	^
Device groups	1	Crown Solar Alarm btn0	Alarm	Yes	Auto (after 10 sec	
Status	2	Crown Solar Alarm btn1	Alarm	Yes	Auto (after 10 seco	
	3	Crown Solar Alarm btn2	Alarm	Yes	Auto (after 10 sec	
Reports and Export	4	Crown Solar Alarm btn3	Alarm	Yes	Auto (after 10 sec	
Communication	5	Crown Solar Alarm btn4	Alarm	Yes	Auto (after 10 seco	
Security devices	6	Crown Solar Alarm btn5	Alarm	Yes	Auto (after 10 seco	
Devices	7	Micro ABB Mains Fail	Alarm	Yes	Auto (after 10 sec	
	8	Micro ABB UPS Fail	Alarm	Yes	Auto (after 10 sec	~
Device Alarms	<				>	
Device Alarm Rules	Alarm de	etails for 'Crown Solar Aları	m htn0'			
GPP Device Status						
Device Communication	Featur	e	Details			
Keyboards and Joysticks	Catego		Alarm			
	Alarm acknowledgement Yes					
Users and Privileges	Acknowledgement type Auto (after 10 seconds)					
Alarm management	Indicate on live video No Show alert on map Yes (Primary channel only)					
Data management	Play so		No	intary channel offly)		
Remote backup		output	No			
	Save in		Yes			
Tasks		-				-

Select any alarm name, its details will be shown in below list. To edit the alarm

settings, click on edit button present on upper left of the window. This will pop up a dialog box where you can configure alarm settings. (See screenshot below)

Edit alarm settings
Alarm Type: Crown Solar Alarm btn0
Basic Communication Macro
Category: OLog OWarning OAlarm Alarm Name: Save Image Category: Alarm Save Image Alarm acknowledgement Auto acknowledge after 10 seconds Indicate on live video Show alarm alert on Map
Only show primary channel     Show all associated channels
Play sound
Popup preconfigured video screen
Popup live video screen
Print alarm

In the **'Basic'** section, you can configure 'Alarm Name', 'Alarm Category', 'Save Image', 'Alarm Acknowledgement' and popup windows.

In **'Communication'** section, you can configure communication to other devices or software's like 'Send Email', 'Send SMS', 'Call Phone', 'Upload to FTP', 'RSS Feed' etc.

In 'Macro' section, you can ask to execute the user defined macro whenever the alarm is generated.

Please refer to 'Alarm management' section for more details.

### 2.7.3 Device Alarms Rules

This page allows you to add specific alarm rules for all device alarms supported by 'Security Management System' application.

Alarm rule can be defined for specific alarm from specific alarm source.

Image: Status   Reports and Export   Communication   Security devices   Device Alarm Rules   Status   Reports and Export   Communication   Security devices   Device Alarm Rules   Status   Reports and Export   Communication   Security devices   Device Alarm Rules   Status   Reports and Export   Communication   Security devices   Device Alarm Rules   Status   Reports and Export   Communication   Security devices   Device Status   Device Communication   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Play sound   Play sound </th <th>Se</th> <th>ecurity Mana</th> <th>igement System - Server</th> <th>(User=admin,Privilege</th> <th>e=Administrator)</th> <th></th>	Se	ecurity Mana	igement System - Server	(User=admin,Privilege	e=Administrator)	
Site_645A04A3DF13   Video devices   Audio devices   Device groups   Status   Reports and Export   Communication   Security devices   Device Alarms   Device Alarms   Device Status   Device Status   Device Status   Device Status   Device Status   Device Status   Device Communication   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Play sound   Digital output   Category   Alarm on map   Play sound   Digital output	<ul><li>▶</li><li>♦</li><li>♦</li><li>♦</li><li>♦</li></ul>				<u>&gt;</u>	V 14.07.11.0
Video devices   Audio devices   Device groups   Status   Reports and Export   Communication   Security devices   Device Alarms   > Device Alarms   Bevice Communication   Security devices   Device Alarms   Perice Alarms   Category   Alarm details for 'Selected' alarm:   Feature   Category   Alarm acknowledgement   Acknowledgement type   Indicate on live video   Show alert on map   Play sound   Digital output   Digital output	192.168.0.64	necurit 🖉	ty devices → Device Alarm	Rules		
Video devices   Audio devices   Device groups   Status   Reports and Export   Communication   Security devices   Device Alarms   Pevice Alarm Rules   GPP Device Status   Device Communication   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Play sound   Digital output   Digital output		2				
Device groups   Status   Reports and Export   Communication   Security devices   Device Status   Device Alarms   > Device Alarms   Pevice Status   Device Status   Device Status   Device Status   Device Status   Device Status   Device Communication   Keyboards and Joysticks   Alarm details for 'Selected' alarm:   GPP Device Status   Device Communication   Keyboards and Joysticks   Alarm acknowledgement   Alarm acknowledgement type   Indicate on live video   Show alert on map   Play sound   Digital output   Digital output   Digital output			F 🗙 🗹 🤝			
Status   Reports and Export   Communication   Security devices   Devices   Device Alarms   Communication   GPP Device Alarm Rules   GPP Device Status   Device Communication   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Play sound   Digital output   Status	Audio devices	Si	r No. Source Name	Alarm Name	Status	Category /
Reports and Export   Communication   Security devices   Devices   Device Alarms   > Device Alarm Rules   GPP Device Status   Device Communication   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Play sound   Digital output   Feave   Display output	Device groups					
Communication   Security devices   Devices   Device Alarms   Device Alarms   Category   Alarm details for 'Selected' alarm:   Feature   Details   Category   Alarm management   Data management   Data management   Play sound   Digital output   Category	Status					
Security devices   Devices   Device Alarms   Device Alarm Rules   GPP Device Status   Device Communication   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Play sound   Digital output   Data management   Digital output	Reports and Export					
Devices          Device Alarms          Device Alarm Rules          GPP Device Status          Device Communication       Feature       Details         Keyboards and Joysticks          Users and Privileges       Alarm acknowledgement         Alarm management       Alare on live video         Data management       Show alet on map         Play sound       Digital output         Category       Envice on status	Communication					
Device Alarms          Device Alarm Rules       Alarm details for 'Selected' alarm:         GPP Device Status       Feature       Details         Device Communication       Category       Alarm acknowledgement         Keyboards and Joysticks       Alarm acknowledgement       Alarm acknowledgement         Alarm management       Dota management       Show alert on map         Play sound       Digital output       Digital output	Security devices					
Device Alarm Rules         GPP Device Status         Device Communication         Keyboards and Joysticks         Users and Privileges         Alarm management         Data management         Data management         Play sound         Digital output         Cave	Devices					
GPP Device Status     Feature     Details       Device Communication     Category     Alarm details for 'Selected' alarm:       Keyboards and Joysticks     Alarm acknowledgement     Alarm acknowledgement       Users and Privileges     Alarm of the construction     Indicate on live video       Alarm management     Show alert on map     Play sound       Data management     Digital output     Envice	Device Alarms	<		:		>
GPP Device Status       Feature       Details         Device Communication       Category       Category         Keyboards and Joysticks       Jarm acknowledgement       Alarm acknowledgement type         Users and Privileges       Indicate on live video       Show alert on map         Data management       Play sound       Digital output         Digital output       Show alert on map       Digital output	Device Alarm Rules	415	rm dotails for 'Solostod' a	larm:		
Device Communication     Peature     Details       Keyboards and Joysticks     Category     Category       Users and Privileges     Alarm acknowledgement     Acknowledgement type       Alarm management     Indicate on live video     Indicate on live video       Data management     Play sound     Play sound       Digital output     Environment     Environment	GPP Device Status					
Keyboards and Joysticks     Alarm acknowledgement       Users and Privileges     Acknowledgement type       Alarm management     Indicate on live video       Data management     Show alert on map       Play sound     Digital output       Sawa     Sawa	Device Communication			Details		-
Users and Privileges     Acknowledgement type       Alarm management     Indicate on live video       Data management     Show alert on map       Play sound     Play sound       Digital output     Save	Keyboards and Joysticks					
Alarm management     Show alert on map       Data management     Play sound       Remote backup     Digital output	Users and Privileges	A	cknowledgement type			
Data management     Play sound       Remote backup     Digital output	Alarm management					
Remote backup Digital output	Data management					
Tasks Save image	Remote backup					
	Tasks	S	ave image			v .

Please click on 'Add new alarm rule' button to create new alarm rule and follow the wizard.

	Add	new alarm rule	
Select alarm source an	d type		
Select Rule			
	Alarm Source:	SD_Bldg1_AccessControl	<b>~</b>
	Alarm Type:	GPP - Reader 0 - Card Accepted	<b>v</b>
			S 2

Please select 'Alarm Source' and 'Alarm Type' for which you want define alarm rule and click on 'Next' to proceed with settings.

Next page will display alarm settings that you can define for this alarm rule.

Add new alarm rule
Alarm source: SD_Access1, Alarm Type: GPP - Reader 0 - Card Accepted
Basic Communication Macro Preset And Tours Multichannel Recording
Category: O Log O Warning O Alarm Alarm Name:
<ul> <li>Enable alarm acknowledgement</li> <li>Auto acknowledge after 10 seconds</li> </ul>
Indicate on live video
Show alarm alert on Map
Only show primary channel
O Show all associated channels
Play sound
Popup preconfigured video screen
Popup live video screen
Print alarm

Configure 'Basic', 'Communication', 'Macro', 'Preset', and 'Multichannel recording' sections as your requirement.

As per the above screenshot, whenever alarm 'GPP – Reader 0- Card Accepted' is generated for the security device 'SD\_Access1'; Security Management System Server software will execute these configured alarm handlers.

In case there is no alarm rule is defined, Security Management System Server software will use alarm handlers from 'Device Alarms' section.



# 2.7.4 GPP Device Status

This page will display status for all 'GPP Devices' which are enabled and which are online.

	ty Manageme	nt System - Se	rver (User=adm	in,Privilege=	Administrator)	-
			*** ***			V 14.
192.168.0.64     Image: Constraint of the second seco		ces → GPP Devi s available for (		h are enable	d and which are	<u> </u>
Audio devices Device groups	vice ID	Device Na	me Input	Real St	atus Alarm Sta	tus Delayed Ala
Status						
Reports and Export						
Communication	<					>
Security devices						
Devices	Relays:					
SD_Bldg1_AccessControl	Sr	Device ID	Device Name	Relay	Real Status	
Device Alarms						
Device Alarm Rules						
GPP Device Status						
Device Communication						
Keyboards and Joysticks	Readers	3:				
Users and Privileges	Sr	Device ID	Device Name	Reader	Last Passe	Last Card S
Alarm management						
Data management						
Remote backup						

Clicking on the 'Refresh' button will refresh the status to current values.

Clicking on the 'Reports' button will pop up 'GPP Device Alarm Search' dialog

				GPP Device Alarm Search	 ×
Alarm sear	h				
Start time End time: Site: Alarm sou Alarm type Alarm Nan Card ID:	7/17/2014 [ Site_645A04A All e: All e: *	15:51:19 3DF13 v v	• • •		
Sr No. 4	(Note: Use * fo	Alarm type	Alarm n		
< Note: Sele	ct alarm search resul	t from list to view	video		

'GPP Device Alarm Search' provides user interface for specifying query parameters -

- a. Start time
- b. End time
- c. Site
- d. Alarm source a GPP device can be selected from the drop down
- e. Alarm type
- f. Alarm name this provides wild card search based on 'alarm name'. \* indicates 'all alarm names'
- g. Card ID this provides wild card search based on 'Card ID'. \* indicates 'all cards'

The search results are displayed in the list.

Clicking on any of the search results displays video associated with the alarm. Video can be viewed with video navigation controls available.

Following functionality is available from the 'GPP Device Alarm Search' dialog

- a. Print report
- b. Save report
- c. Export video
- d. View video in playback screen



# 2.7.4 Device Communication

This page allows you to enable and define 'ABB device settings'

Secur	ity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
		V 14.07.11.01
192.168.0.64 🧨	Security devices → Device Communication	1
Site_645A04A3DF13	ABB device settings Enable device IP address: 192,168.0.64	
Device groups Status		
Reports and Export	Port number: 6600	
Communication		
Security devices		
Devices		
SD_Bldg1_AccessControl		
Device Alarms		
Device Alarm Rules		
GPP Device Status		
Device Communication		
Keyboards and Joysticks		
Users and Privileges		
Alarm management		
Data management		
Remote backup		
Tasks v		



# 2.7 Keyboards and Joysticks

This page lets you add standard USB or IP based CCTV keyboards or joysticks to the system.

# 2.7.1 Configuring keyboard and joysticks

	Security Management System - Server (User=admin,Privilege=Administrator) – 🗆 🗆
<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li></ul>	
192.168.0.64	Keyboards and Joysticks - Keyboards and Joysticks
New Office Building	
Video devices	Add Keyboard /Joystick
Audio devices	Sr No. Device ID Device Name: TD LICE Joyctick
Device groups	Device Name: ID_ OSB Joystick
Status	Device Description: USB Joystick
Reports and Export	Device Type: Standard Joystick 🗸
Communication	Select Joystick: Generic USB Joystick
Security devices	Joystick movement for zoom: Normal
Keyboards and Joysticks	
Keyboards and Joysticks	☑ Enable
Status	
Users and Privileges	
Alarm management	
Data management	
Remote backup	
Tasks	
Linked servers	
Server settings	
Video panorama	
User interface settings	v

Click on 'Add' button in the will pop-up a dialog box where you can enter device name, device description (any string for identifying the device), select type from available options, and select joystick from listed options. Click on 'Enable' to enabling joystick usage into the application. Select joystick movement for zoom to be Normal or Opposite.

# 2.7.2 Keyboard and Joystick details

This page will list all the parameter for the joystick. You can enable/disable joystick from this page.

Secu	rity Management System - Server (User=admin,Privilege=Administrator) - 🗖 🗙
▶ 😯 ♦	
192.168.0.64 🧳	Keyboards and Joysticks – Keyboards and Joysticks – ID_USB Joystick
New Office Building 📝	
Video devices	Device ID: ID_USB Joystick
Audio devices	Device Decsription: USB Joystick
Device groups	Device Decsription: USB Joystick
Status	Device Name: Generic USB Joystick
Reports and Export	✓ Enable
Communication	Joystick movement for zoom:
Security devices	Joystick movement for zoom: Normal
Keyboards and Joysticks	
Keyboards and Joysticks	
ID_USB Joystick	
Status	
Users and Privileges	
Alarm management	
Data management	
Remote backup	
Tasks	
Linked servers	
Server settings	
Video panorama 🛛 🗸	

### 2.7.3 Keyboard and Joystick status

This page lists commands from all the CCTV keyboards and joysticks and shows their status report. CCTV Keyboards and joysticks can be used to select video screens (discussed later) and video channels from selected video screens, and also control selected video channel PTZ positions.

This status window is for logging purpose so that user can understand what commands are sent to the application and what their statuses are.

Secur	rity Management System - Se	rver (User=admin,Pr	ivilege=Administrat	or)	_ □
<ul> <li>►</li> <li>►</li></ul>		*** ***	<u>&gt;</u>	<i>i</i>	V 14.07.11
192.168.0.64	Keyboards and Joysticks ¬	Status			
New Office Building 📝					
Video devices	Joystick/Keybaord logs				
Audio devices	Timestamp	Command	Parameter	Status	Comment
Device groups	2014/07/22 16:15:37	PTZ	Stop	Error	Invalid se
Status	2014/07/22 16:20:49	PTZ	Move left	Success	
Reports and Export					
Communication					
Security devices					
Keyboards and Joysticks					
Keyboards and Joysticks					
ID_USB Joystick					
Status					
Users and Privileges					
Alarm management					
Data management					
Remote backup					
Tasks	<				>
Linked servers					
Server settings					

Click on 'Clear list' button it to delete all the items from the status list.

The screenshot displays joystick logs.

The 'Command' field describes the type of operation performed by the joystick.

The 'Parameter' field mentions the operation performed from the joystick,

The 'Status' field mentions whether the command was successful or unsuccessful.

The 'Comment' field gives you description on why command was unsuccessful.

# 2.8 Users and Privileges

This section is used for administration tasks, defining users who can access the server software, their privileges, priorities while doing PTZ on cameras etc.

#### 2.8.1 Users

This link displays all the configured users which can access this server software. You can add new user to the system, delete or disable already configured.

Click on 'Add new user' button to add new user. Provide details about user name, password, select privilege from available options, click on 'Enable user' to enable user access to the system, provide other optional details like address phone numbers and email address. Click on 'Add' to complete adding new user.

Sec	urity Ma	nagement System - Se	erver (User=admin,Privilege=/	Administrator)	
	-		id New User		V 14.07.11.01
192.168.0.64	User	Ad			1
New Office Building 🥂		User Name:	Operator2		
Video devices					
Audio devices		Password:	•••••		
Device groups		Confirm Password:	•••••	Туре	
Status		Privilege:	On another	In Built	_
Reports and Export		Privilege:	Operator v	Configured	_
Communication			Enable user		
Security devices	-	Address Line 1:	Address1		_
Keyboards and Joysticks		Address Line 2:	Address2		_
Users and Privileges					
Vsers	-	Phone No:	123456789		
admin		E-mail ID:	operator1@server.com		
ор					
Active directory users					_
Privileges					
PTZ priority				-	
Change password					
Alarm management					
Data management					
Remote backup					

Select any user and click on 'Details' button to see and update user details. From details page (screen shot at below page), you can edit the details and change password for selected user.

Select any user from the list and click on 'Remove' button to remove it from the system.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com

Se	ecurity Manage	ment System - Sei	ver (User=admin,Pr	ivilege=Admin	istrator)	
<ul> <li>►</li> <li>►</li></ul>			<ul><li>(1)</li><li>(2)</li><li>(3)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li></ul>	<u></u>	ò 🚺 🧯	V 14.07.11.0
192.168.0.64	🧨 Users and	d Privileges → Users	;			
New Office Building	2					
Video devices						
Audio devices						
Device groups	Sr N	o. User Name	Privilege	Enabled	Туре	
Status	1	admin	Administrator	Enabled	In Built	
Reports and Export	2	operator1	Operator	Enabled	Configured	
Communication	3	operator2	Operator	Enabled	Configured	
Security devices						
Keyboards and Joysticks						
Users and Privileges						
Users						
admin						
operator1						
operator2						
Active directory users						
Privileges						
PTZ priority						
Change password						
Alarm management						
Data management	~					

#### Screenshot – User list

### Screenshot – User details

		ا 😺 🔍		
		8 🕸 🝼	2 6	V 14.07.11.01
192.168.0.64	Users and Privileges -	• Users → operator1		
New Office Building 🧖				
Video devices	User Name:	operator1		
Audio devices		operatori		- <u>-</u>
Device groups	Privilege:	Operator v		
Status	Status:	Enabled		0
Reports and Export		O Disabled		
Communication				
Security devices	Address Line 1:	address1		
Keyboards and Joysticks	Address Line 2:	address2		
Users and Privileges				
Users	Phone No:	12345678		
admin				
operator1	E-mail ID:	operator1@server.com		
operator2	Type:	Configured		
Active directory users	type.	Conngureu		
Privileges				
PTZ priority	?			
Change password				
Alarm management				
Data management				



#### 2.8.2 Active directory users

You can add Windows active directory users to the server software from this link.

Click on 'Add new user' button to pop-up a dialog box where you can provide IP address of Windows Active Directory server and click on 'Search' button to fill up 'User name' option box with the Windows active directory users from the selected IP address.

Then you can add user just like normal user and do all other operations onto it like enabling/disabling user access to the software, privilege assignment, user details etc. as described above.

Sec	urity Management System - Server	(User=admin,Privilege=Administrator)	×
Image: Second system       Image: Second system         Image: Second		ectory users Add New Winodws Active Directory User	V 14.07.11.01
Audio devices		Add New Winodws Active Directory Oser	
Device groups	Sr No. User Name	Server IP Address: 192 . 168 . 0 . 1	
Status		User Name: Please select user	
Reports and Export			
Communication		Privilege: Operator 🗸	
Security devices		Enable user	
Keyboards and Joysticks		Address Line 1:	
Users and Privileges		Address Line 2:	
Users		Address Line 2:	
admin		Phone No:	
operator1		E-mail ID:	
operator2			
Active directory users			
Privileges			
PTZ priority	<		>
Change password			
Alarm management			
Data management 🗸 🗸			



#### 2.8.3 Privileges

This link displays the list of currently configured privileges.

2	Security Mana	agemer	nt System - Server (Use	r=admin,Privilege=A	Administrator)	_ □
▶ <b>२२ २२</b>		4	1 / 2 😻	• •		V 14.07.11.01
192.168.0.64	🧨 Users	and Pri	vileges – Privileges			
New Office Building	2					
Status		<b> -     </b>	= ×			
Reports and Export						
Communication	s	r No.	Privilege Name	Type		
Security devices	1		Administrator	In Built		
	2		Operator	In Built		
Keyboards and Joysticks	3		Guest	In Built		
Users and Privileges	4		Web Client	In Built		
Users	5		Smartphone Client	In Built		
Active directory users	6		SecurityPersonnel	Configured		
Privileges						
Administrator						
Operator						
Guest						
Web Client						
Smartphone Client						
SecurityPersonnel						
PTZ priority						
Change password						
Alarm management						

The 'Add New Privilege' **The** button can be used to configure a new privilege.

Any row from the list can be selected, and the corresponding privilege is treated as the currently selected privilege.

**C** can be used to delete the currently selected privilege. It The 'Delete' button is not possible to delete an 'In-built' type privilege.

The 'Details' button can be used to view the settings of the currently selected privilege.

#### Add new privilege

Use button to add new privilege to the system. This will pop-up a dialog box where you can enter privilege name, and select 'Base privilege' from which it needs to be derived.

You can then enable/disable 'Functions' from the list to this privilege. Please select 'Channel group' this privilege will have access to.

And finally click on button to add new privilege ('Security Personnel' in this example) to the system.

Add New P	rivilege ×					
Privilege Name: Securit Base Privilege: Operat	ty Personnel					
Features allowed:	Features not allowed:					
Privilege Name Playback view Alarm search Alarm view Change self password Autostart settings Channel groups allowed:	Privilege Name					
Channel groups allowed: Channel Group CG_AllGateCameras Channel Group CG_AllChannels CG_AllChannels CG_AllChannels						



#### **Privilege Details**

The 'Privileges' link has sub-links, one for every privilege configured in the system. Clicking on any of these sub-links displays the privilege details page for that privilege.

Secu	rity Management System - Server (User=admin,Privilege	=Administrator) – 🗆 🗙
		V 14.07.11.01
192.168.0.64	Users and Privileges → Privileges → SecurityPersonnel	
New Office Building	Privilege Name: SecurityPersonnel Privilege Type: Configured (Base Privilege: Oper Features allowed: Feature	rator)
Security devices	Feature Name ^ Featu	ure Name
Keyboards and Joysticks	Playback view	
Users and Privileges	Alarm search	
Users	Change self password	
Active directory users	Autostart settings	
Privileges	View bookmarks created by	
Administrator	View bookmark created by a	
Operator		>
Guest	Device groups allowed: Device	groups not allowed:
Web Client	Channel Group Chan	inel Group
Smartphone Client	CG_AllChannels CG_A	llGateCameras
SecurityPersonnel		
PTZ priority		
Change password		
Alarm management		
Data management 🗸 🗸		

The 'Edit' button can be clicked to start editing the privilege configurations. The 'Edit' button is enabled only for the 'configured' type privileges and not the 'In-built' type privileges.

When in the 'edit' mode, it is possible to change the 'Privilege Name' and the authentication of functions for that privilege and also assign one or mode channel groups to new privilege. Users with this new privilege will only see and operate video channels assigned to their channel group.

Change 'Channel groups allowed' for this privilege from below section (shown at screenshot)

Clicking on 'Save' button kaves the changes done to the privilege

configurations. Clicking on the 'Cancel' button **set in the 'undo'** operation and configurations are reset to the previously saved settings.



#### 2.8.4 PTZ Priority

It is possible to define PTZ priorities for the system. This lets better control PTZ cameras and some users can have high priority while doing PTZ for the cameras while other users can wait as per their priority.

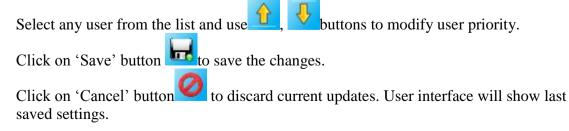
Sec	urity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
<b>&gt;&gt;</b>		V 14.07.11.01
192.168.0.64	Users and Privileges → PTZ priority	
New Office Building	Enable PTZ priority	
Security devices	Sr No. User name	
Keyboards and Joysticks	1 admin	
Users and Privileges	2 operator1	
Users	3 operator2	
Active directory users		
Privileges		
Administrator		
Operator		
Guest		
Web Client		
Smartphone Client		
SecurityPersonnel		
PTZ priority		<b></b>
Change password		
Alarm management	Note: Users listed at the top have higher priority.	
Data management		

Check the 'Enable PTZ priority' option and define 'PTZ lock time' in seconds.

All configured users of the system are listed in the list and users listed at the top are having high priority. Priority goes on decreasing as serial number (Sr. NO. in above screenshot) goes on increasing.

When a high priority user does PTZ, then PTZ functionality gets locked for 'PTZ lock time' seconds, all users having low priority than the user who does the last PTZ needs to wait for 'PTZ lock time' for doing PTZ on any configured cameras.

A high priority user can always invoke PTZ any time if PTZ locked by low priority user and PTZ will get locked for configured time for all users with low priority than current user who just did PTZ.



SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com

### 2.8.5 Change password

You can change password for currently logged user from this page.

Click on 'Edit' button *to* enable user interface.

Enter 'Old password', 'New password' and 'confirm new password'

Click on 'Save' button to save changes.

Sec	urity Management System - Serv	ver (User=admin,Privilege=	Administrator)	- 🗆 🗙
<b>&gt;&gt;</b>		😻 👵 🗾	è 🚺 🥡	V 14.07.11.01
192.168.0.64	Users and Privileges → Chang	je password		
New Office Building 🧳				
Status		admin		1
Reports and Export				
Communication	Old Password:	••••		
Security devices	New Password:	••••	]	
Keyboards and Joysticks	Confirm New Password:	••••	]	
Users and Privileges	Commini New Password:	•••••	]	
Users				
Active directory users				
Privileges				
Administrator				
Operator				
Guest				
Web Client				
Smartphone Client				
SecurityPersonnel				
PTZ priority				
Change password				
Alarm management				
Data management	,			

### 2.9 Alarm management

### 2.9.1 Alarm handling

Alarm handling link displays alarm settings for each alarm type and allows you to configure settings.

<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li>&lt;</ul>			ent System - Server (User	eadmin, Privi		V 14.07.11.0	
192.168.0.64	A	larm mana	gement – Alarm handling				
Site_645A04A3DF13	1						
Video devices	^	2					
Audio devices		Sr No.	Alarm Name	Category	Alarm acknowledgement	Acknowledgement ^	
Device groups		1	Intrusion	Alarm	Yes	Auto (after 10 seco	
Status		2	Line crossing	Alarm	Yes	Auto (after 10 sec	
		3	Wrong direction move	Alarm	Yes	Auto (after 10 seco	
Reports and Export		4	Unattended Object	Alarm	Yes	Auto (after 10 seco	
Communication		5	Motion detection	Alarm	Yes	Auto (after 10 sec	
Security devices		6	Device alarm	Alarm	Yes	Auto (after 10 seco	
Keyboards and Joysticks		7	Security device alarm	Alarm	Yes	Auto (after 10 seco	
		8	Video signal loss	Alarm	Yes	Auto (after 10 sec v	
Users and Privileges		<				>	
Alarm management		Alarm de	tails for 'Intrusion':				
Alarm handling		Alahin ue					
Alarm Rules		Feature	2	Details	3	^	
		Catego	ry	Alarm	Alarm		
Generate test alarms		Alarm acknowledgement Yes					
Data management			ledgement type		after 10 seconds)		
Remote backup		Indicate on live video No					
Tasks		Show alert on map Yes (Primary channel only) Play sound No					
Linked servers		Digital		No			
Server settings	Saveimage						
Server Settings						¥	

Select any alarm name, its details will be shown in below list. Double click on any alarm from list to view its details.

To edit the alarm settings, click on edit button present on upper left of the window. This will pop up a dialog box where you can configure alarm settings. (See screenshot below)

Edit alarm settings
Alarm Type: Intrusion
Basic Communication Macro
Category: O Log O Warning O Alarm Alarm Name: Save Image Category: O Log O Warning O Alarm Alarm Name: Save Image Category: O Log O Warning O Alarm Save Image Category: O Log O Warning O Alarm Alarm Save Image Category: O Log O Warning O Alarm Category: O Log O Alarm Category
Show alarm alert on Map
Only show primary channel
<ul> <li>Show all associated channels</li> <li>Play sound</li> </ul>
Popup preconfigured video screen
Popup live video screen
Print alarm

In the 'Basic' section, you can configure following alarm settings

- a. Alarm Name: You can specify different alarm names to the generated alarm.
- b. Alarm Category: Choose between 'Log', 'Warning', or 'Alarm'.
- c. Save Image: When checked will save alarm image.
- d. Enable alarm acknowledgement: If enabled you can specify whether alarm should be auto acknowledged or not, if yes then time after which it will be auto-acknowledged. If autoacknowledgement is unchecked, operator should manually acknowledge the alarm.



e. Popup windows:

You can enable popup of **preconfigured video screen** (separate screen where you can configure screen layout and video channels – for configuring please refer to 'User interface->Display settings' tab) and /or **live screen** (separate live screen displayed in 1x1 layout mode with current alarm video channel viewed, you can drag drop other video channels and change the layout as per your choice.)

f. Print alarm: If enable application will print the alarm details to default printer.

In **'Communication'** section, you can configure communication to other devices or software like 'Send Email', 'Send SMS', 'Call Phone', 'Upload to FTP', 'RSS Feed' etc.

	Edit alarm settings					
Alarm Type: Intrusion						
Basic Communication	Macro					
🗌 Digital output	Port: 2 V					
Send E-mail	Use default					
	O Use other E-mail ID					
	Send E-mail to:					
	CC E-mail to:					
Send SMS	Use default phone number V Number:					
Call Phone	Use default phone number Vumber:					
Upload alarm details to FTP						
✓ Add alarm to a	active alarms RSS feed					

In **'Macro'** section, you can ask to execute the user defined macro whenever the alarm is generated.

	Edit alarm settings				
Alarm Type: Intrusion					
Basic Communication Macro					
Execute Macro					
Macro path:	C:\Program Files\Infinova\Security N				
XML File Path:	C:\Program Files\Infinova\Security N				
Argument Name:	Parameter1				
Sr No. Argument					
1 Parameter	r1				
	Sec. 20				



### 2.9.2 Alarm Rules

This page allows you to add specific alarm rules. Alarm rule can be defined for specific alarm from specific alarm source.

	Secur	ity Managem	ent System - Server	(User=admin,Privile	ege=Administrator)	_ □
<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li></ul>				<b>i</b>	<u>&gt;</u>	V 14.07.11.0
192.168.0.64	1	Alarm mana	agement → Alarm Rule	es		
Site_645A04A3DF13	2					
Video devices	^	+	🗙 📝 🥣			
Audio devices		Sr No.	Source Name	Alarm Name	Status	Category /
Device groups		5	ood oo name	, define the first state of the		oucegory ,
Status						
Reports and Export						
Communication						
Security devices						
Keyboards and Joysticks						
Users and Privileges		<				>
Alarm management		Alarm d	etails for 'Selected' a	larm.		
Alarm handling						^
Alarm Rules		Featur	-	Details		
Generate test alarms		Categ Alarm	acknowledgement			
Data management		Acknow	wledgement type			
Remote backup		Indicate on live video Show alert on map				
Tasks		Play s				
Linked servers		Digital	output			
Server settings		Save i	mage			¥
Video panorama	~					

Please click on 'Add new alarm rule' button to create new alarm rule and follow the wizard.

	Add	new alarm rule	
Select alarm source and	type		
Select Rule			
4	larm Source:	Main Gate Entry	<b>~</b>
	Alarm Type:	Wrong direction movement	<b>~</b>
		wrong direction movement	
			se 🚽 🥥

Please select 'Alarm Source' and 'Alarm Type' for which you want define alarm rule and click on 'Next' to proceed with settings.

Next page will display alarm settings that you can define for this alarm rule.

Add new alarm rule
Alarm source: Main Gate Entry, Alarm Type: Wrong direction movement
Basic Communication Macro Preset And Tours Multichannel Recording
Category: O Log O Warning O Alarm Alarm Name:
Enable alarm acknowledgement     Auto acknowledge after 10 seconds
Indicate on live video
Show alarm alert on Map
Only show primary channel
O Show all associated channels
Play sound
Popup preconfigured video screen
Popup live video screen
Print alarm

Configure 'Basic', 'Communication', 'Macro', 'Preset', and 'Multichannel recording' sections as your requirement.

For Alarm rule's you can define 'Preset and Tour' and 'Multichannel Recording' settings.

			Edit alarm ru	le			
Alarm s	source: M	1ain Gate Entry, A	larm Type: Wrong dire	ction move	ment		
Basic	Comm	unication Macro	Preset And Tours M	ultichannel	Recording	]	1
	Move 'Vi Select ty	deo channel': /pe:	South Gate Preset	* *			
	To 'Conf	igured Preset':	Parking	¥			
			4				
	Configur	red preset/tour lis	t:				
	Sr No.	Video channel	Preset/Tour name	Туре			
	1	Main Gate Entry					
	2	South Gate	Parking	Preset			
	×						
						4	0

This means when 'Wrong direction movement' alarm is generated from video source 'Main Gate Entry' then Main gate Entry camera will move to WaterTankPosition preset and South Gate camera to Parking preset.

Multichannel recording allows you to set recording for different channels when selected alarm is generated.

			Edit alarm rule		
Alarm	source: N	1ain Gate Entry, Ala	arm Type: Wrong direction movement		
Basic	Comm	unication   Macro	Preset And Tours Multichannel Recording		
	Record '	Video channel':	South Gate Y		
	Recordir	ng duration (sec):	30		
	Configu	red recording list:	<u>≁</u>		
	Sr No.	Video channel	Recording duration (secon		
	1	Main Gate Entry	10		
	2	South Gate	30		
	×				

As per above screen shot whenever alarm 'Wrong direction movement' is generated for the security device 'Main Gate Entry', channels Main Gate Entry will performs recording for 10 seconds and South Gate for 30 seconds.

In case there is no alarm rule is defined, Security Management System Server software will use alarm handlers from 'Device Alarms' section.



#### 2.9.2 Generate test alarm

Using this link, users can generate test alarms for video channel of their interest. This can be used for testing purpose of alarm handlers.

Secu	urity Management System - Serve	er (User=admin,Privilege=Administrator)	- 🗆 🗙
			V 14.07.11.01
192.168.0.64	Alarm management → Generat	e test alarms	
New Office Building 🧳			
Video devices	Alarm to be generated:	Intrusion	
Audio devices	_		
Device groups	Channel name:	Main Gate Entry 🗸	
Status	Generator ID:		
Reports and Export			
Communication	Primary channel ID:	Not applicable v	
Security devices	Secondary channel ID:	Not applicable 🗸	
Keyboards and Joysticks	Additional Information:		
Users and Privileges	Additional Information:	Additional Information Text	
Alarm management			
Alarm handling			
Alarm Rules			
🕨 Generate test alarms		<u> </u>	
Data management			
Remote backup			
Tasks			
Linked servers			
Server settings			
Video panorama 🗸 🗸			

Select 'Alarm to be generated' from the available options.

Then select 'Channel name' ('alarm source' for the alarm to be generated).

Then specify 'Generator ID' (e.g. area/zone ID for alarm generated from video analytics module)

Select primary and secondary channel IDs – keep 'Not applicable' if not to be used. Type any additional information into text box provided.

Click on 'Generate test alarm' button *to generate the alarm*.

This generated alarm will work the same way as it has actually generated by the video source. All alarm handlers for this particular alarm will get executed.



# 2.10 Data management

All data management activities can be configured from this section

### 2.10.1 Recording drives

This is already discussed in '**Quick setup wizard**' section above. (Please refer 'Quick setup wizard - Recording drives')

### 2.10.2 Activity logs

Enable recycling of activity database from this section. Specify recycle start and stop threshold in number of records unit. Also configure threshold for 'Activity logs full' alarm.

Secu	rity Management System - Server (User=admin,Privilege=Administrator) - 🗖 💌
▶ 🐼 🐼	
192.168.0.64	Data management – Activity logs
New Office Building 🧳	
Video devices	✓ Recycle activity logs
Audio devices	Recycle start threshold: 48000 Records
Device groups	Recycle stop threshold: 40000 Records
Status	Activity logs full alarm threshold: 50000 Records
Reports and Export	
Communication	
Security devices	
Keyboards and Joysticks	
Users and Privileges	
Alarm management	
Data management	
Recording drives	
Activity logs	
Manual operations	
Scheduled operations	
Recording history	
Remote backup	
Tasks	
Linked servers V	

Click on 'Save' button to save the settings.

Click on 'Cancel' button <sup>1</sup> to discard currently updated values. This will disable user interface and show the currently used settings.



#### 2.10.3 Manual operations

Data recorded by the application can be manually archived or cleaned from this page.

Please note – both these options will remove online data and system will no longer have access to the data. You will be asked for confirmation before doing the operation.

#### 2.10.3.1 Archive data

:	Security Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
<b>&gt;&gt;</b>		/ 14.07.11.01
192.168.0.64	📝 Data management – Manual operations	
New Office Building	2	
Video devices	Action:	
Audio devices	Action: Archive V	
Device groups	Archive data before: 7 day(s)	
Status	Archive data to: E: VArchives	
Reports and Export		
Communication	Do not delete alarms data	
Security devices	Storage Space Check	
Keyboards and Joysticks	Storage space required: Not calculated Available disk space: Not calculated	
Users and Privileges	Status: Not calculated	
Alarm management		
Data management		
Recording drives		
Activity logs		
Manual operations		
Scheduled operations		
Recording history		
Remote backup		
Tasks		
Linked servers	v	

Please select 'Action' from the options.

It can either be 'Archive' (which means move data) or 'Cleanup' (which means delete data permanently). Select 'Archive' option.

Configure 'Archive data before' - Data before these days would be archived. Select path for archive ('Archive data to')

If you wish not to move/archive alarms data, then check 'Do not delete alarms data'.

'Storage Space Check' features can be used to check if there is sufficient space at the

archive path you selected. Click on button to process this. This will tell you the space required for archiving data for configured number of days, the available disk space on the archive data path you have configured and the status for archiving the data.



Click on button to start processing. Progress will be displayed below this button. Use button any time after starting the process to abort the process.

#### **Player application –**

As this operation makes data offline to the system, **a player** application is given to play this data later when needed. This player application will also get copied the same path you choose to archive the data. You can execute the player application and it will start playing data automatically. You can navigate through the data using controls available on the player application.

#### 2.10.3.2 Cleanup data

This removes data permanently from the system.

Security Management System - Server (User=a	dmin, Privilege=Administrator)	
		V 12.10.26.06
192.168.0.58	Data management → Manual operations	
Site_207C8F1117F4		
Channel groups	Action: Cleanup	
Reports and Export	Cleanup data before: 7 day(s)	
Communication	Cleanup activity logs	
Security devices	V Cleanup activity logs	
Keyboards and Joysticks	🕼 Do not delete alarms data	
Users and Privileges		
Alarm management		
Data management		
Recording drives		
Activity logs		
Manual operations Scheduled operations	Status: Completed	
Tasks		
Failover recording	Last operation completed at:17/01/2013 14:11:18	
Server computer settings		
Video panorama		
User interface settings		
-		
0 <del>-</del>		

Please select 'Action' as 'Cleanup'.

Configure cleanup data days (say X). This will delete the 'X days before data'. Check 'Cleanup activity' logs to clean up them.

Check 'Do not delete alarms data' to skip deleting alarms data while cleaning up data.

Click on **button** to start processing. Progress will be displayed below this button.

Use **button** any time after starting the process to abort the process.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com



### 2.10.4 Scheduled operations

Action for scheduled operation can 'None' or 'Archive' or 'Cleanup' Data archive or cleanup can be scheduled as per the requirement using this page.

#### 2.10.4.1 None -

Select this option if you do not want to perform any scheduled action to the data.

#### 2.10.4.2 Archive –

:	Security Management System -	Server (User=admin,Privilege=Admini	strator) – 🗆 🗙
<ul> <li>►</li> <li>►</li></ul>	Data management - Sch	eduled operations	V 14.07.11.01
New Office Building			
New Office Building			
Video devices	Action:	Archive 🗸	2
Audio devices		Addive	
Device groups	When:	Weekly v	
Status	On Day:	Monday V	0
Reports and Export		Honday	
Communication	At Hour:	12 🗸	
Security devices	Archive data before:	7 days	
Keyboards and Joysticks	Archive data before.	, days	
Users and Privileges	Archive data to:	E:\Archives	
Alarm management	Do not delete alar		
Data management			
Recording drives		×	
Activity logs			
Manual operations			
Scheduled operations			
Recording history			
Remote backup			
Tasks			
Linked servers	✓		

Select action as 'Archive'.

Configure when to perform this operation 'Weekly, daily, or monthly', chose the day for the operation when mode is not daily, and hour of the operation.

Configure 'number of days before' the data would be archived and the path to archive data.

Check 'Do not delete alarms data' if you wish not to move alarms data to archive path.

Application will display the status of the scheduled operation at this page.

### 2.10.4.3 Cleanup

Security Management System - Server (User=ad	Imin,Privilege=Administrator)	
		V 12.10.26.06
192.168.0.58	Data management → Scheduled operations	
Site_207C8F1117F4		
Channel groups Status Reports and Export Communication	Action: Cleanup        When:     Daily       On Day:     Monday	
Security devices	At Hour:	
Keyboards and Joysticks Users and Privileges	At Hour:	
	Cleanup data before: 7 days	
Alarm management Data management Recording drives Activity logs Manual operations Scheduled operations Tasks Failover recording Server computer settings Video panorama User interface settings	Cleanup activity logs Do not delete alarms data	

Select action as 'Cleanup'.

Configure when to perform this operation 'Weekly, daily, or monthly', chose the day for the operation when mode is not daily, and hour of the operation.

Configure 'number of days before' the data would be cleaned up.

Check 'Do not delete alarms data' if you wish not to delete alarms data.

Application will display the status of the scheduled operation at this page.

### 2.10.5 Recording History

This page allows to you to recreate recording history information, which will be used by 'Video Search Screen' to display status of recording for every channel.

	Secur	ity Management System - Server (User=admin,Privilege=Administra	ator) 🗕 🗆 🗙
▶ 🐼 😵			V 14.07.11.01
192.168.0.64	2	Data management – Recording history	
New Office Building	2	Recreate recording history information	
Video devices Audio devices	^	Duration: 7/19/2014 V To 7/20/2014 Channels selected	
Device groups			
Status		Video channel Video channel South Gate	
Reports and Export		Main Gate Entry South Gate	
Communication			
Security devices			
Keyboards and Joysticks			
Users and Privileges			
Alarm management			
Data management		< > <	>
Recording drives		Processing priority:	8
Activity logs			
Manual operations			
Scheduled operations			
Recording history			
Remote backup			
Tasks			
Linked servers	~		



# 2.11 Remote Backup

### 2.11.1 Remote Backup

Se	ecurity N	/lanagem	ent System - Serve	er (User=admin,Privilege=	Administrato	or)		
▶ 🔇 🔇					►	1	V 14.07.11.0	
192.168.0.64	ne Re							
Site_645A04A3DF13	2							
Video devices	~	<b>*</b>	2					
Audio devices		Sr No	Link Name	Channel Name	Enable	Start Date	Start Time	
Device groups								
Status								
Reports and Export								
Communication								
Security devices								
Keyboards and Joysticks								
Users and Privileges								
Alarm management								
Data management								
Remote backup								
Remote backup								
Recording drives								
Tasks								
Linked servers		<					>	
Server settings								
Video panorama		×						
User interface settings	~							

	Add Remote Backup		X		
<ul> <li>Enable remote backup</li> <li>Start backup from:</li> <li>Start backup operation at:</li> <li>Repeat frequency:</li> <li>Recording drive:</li> </ul>	7/17/2014       ▼         00:00:00       ↓         1       days         Keep default       ✓	6 hours			
Link Name	Channel Name				
🕂 🖉					

# 2.11.2 Recording Drives

			stem - Server (Use	r=aumin,Priv	nege= <i>P</i>	Administrator)	- 🗆 🗙
				•	×		V 14.07.11.01
192.168.0.64	Remote bac	kup → I	Recording drives				1
Site_645A04A3DF13	Recyc	le drive	!S				
Video devices	Recyc	le start	threshold:	20	GB		1
Audio devices	Recyc	le stop	threshold:	50	GB		
Device groups	Low dist	snace	alarm threshold:	10			
Status	2011 0101		alarm an osholar	10	00		Ø
Reports and Export							
Communication	Recordin	ng drive	C:\				
Security devices	Recordin	g drive	(s):		Ref	freshing in 37 second	s
Keyboards and Joysticks							
Users and Privileges	Sr No.		Total size	Free size			_
Alarm management	1	D:\	365.75 GB	338.67 GB			
Data management							
Remote backup							_
Remote backup							
Recording drives							
Tasks							
Linked servers	T						
Server settings							
Video panorama							
User interface settings v							



## 2.11 Tasks

Tasks can be scheduled from this page.

### 2.11.1 Surveillance tasks

Click on **to add new surveillance task to pop-up a dialog box**.

Enter task name, select type of task from available options, select task status (enable/disable task), and define task parameters and its schedule.

Task schedule can be daily or weekly. Please select day when schedule is weekly. Select hour at which this task should get executed.

For 'Daily' you can select multiple days of week for which you want to run this task. For 'Weekly' you can select a day when you want to schedule this task.

And finally click on button to save the task.

Secur	ity Management System -	Server (User=admin,Privilege=Administ	trator) – 🗆 🗡
		Add surveill	ance task
192.168.0.64	Tasks → Surveillance tas	Surveillance Task Name:	Task1
New Office Building	碞 🛃 🗙		Move to preset v
Audio devices	Sr No. Task name	L	Enabled V
Device groups		Surveillance Task Parameters	
Status		Video channel: Main	Gate Entry 🗸
Reports and Export		To Preset: Water	r Tank Position
Communication		Surveillance Task Schedule	
Security devices			
Keyboards and Joysticks		When: Daily	✓
Users and Privileges		Time: 16:42	:17 🖨
Alarm management			
Data management			
Remote backup		Day Of Week	
Tasks		✓ Sunday ✓ Wednes	sday 🗹 Friday
Surveillance tasks		✓ Monday ✓ Thursda	ay 🗹 Saturday
Linked servers		✓ Tuesday	
Server settings			
Video panorama			0
User interface settings			



Select any row from the tasks list and click *select to button to edit the task. Same dialog* box will get popped up where you can edit the task type, task status, task parameter and its schedule.

Select any row from list of the tasks and click button to remove the task from the system.

The task list will show details about the configured tasks and their due time.

Sec	urity M	anagem	ent System - Ser	ver (User=admin	Privilege=Adn,	ninistrator)	
▶ 😵 📽				*** ***	P		
192.168.0.64 🧳	Tas	ks → Sur	veillance tasks				
New Office Building 📝							
Video devices		+	🖉 🗙				
Audio devices		Sr No.	Task name	Task type	Details	Status	Task due on
Device groups		1	Task1	Move to preset	VC_MainGa	Enabled	2014/07/2
Status							
Reports and Export							
Communication							
Security devices							
Keyboards and Joysticks							
Users and Privileges							
Alarm management							
Data management							
Remote backup							
Tasks							
Surveillance tasks							
Linked servers							
Server settings							
Video panorama							
User interface settings							



## 2.12 Linked Servers

### 2.12.1 Failover Server

This page shows the details about 'assigned failover server' to this server application.

Failover server is a separate application which will monitor this server application (or may monitor multiple server applications simultaneously depending upon its configuration).

When any of the monitored servers get offline, failover server will immediately start processing offline server and it will record data on offline server's behalf and all the client application too will connect to the failover server to get live, playback and alarm data feeds.

'Failover server' can be assigned from 'Failover management server' application which will get installed automatically when server application is installed. Please locate 'Failover management server' in the same installation path and follow guidelines to configure/assign failover server to server application.

Image: Solution of the server settings   Security devices   Alam management   Data management   Renots and Privileges   Alam management   Data management   Renots backup   Tasks   Linked servers   Server settings		Security Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
Site_645A04A3DF13   Video devices   Audio devices   Device groups   Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Data management   Tasks   Linked servers   Failover server   Redundant server   Server settings   Video panorama	▶ 🔗 😵 34 ♦ Ø		V 14.07.11.01
Video devices Audio devices Device groups Status Reports and Export Communication Security devices Keyboards and Joysticks Users and Privileges Alarm management Data management Data management Linked servers Failover server Redundant server Server settings Video panorama	192.168.0.64	Clinked servers → Failover server	
Video devices Audio devices Device groups Status Reports and Export Communication Security devices Keyboards and Joysticks Users and Privileges Alarm management Data management Data management Linked servers Failover server Redundant server Server settings Video panorama	Site_645A04A3DF13		<b>S</b>
Audio devicesDevice groupsStatusStatusReports and ExportCommunicationSecurity devicesKeyboards and JoysticksUsers and PrivilegesAlarm managementData managementData managementData managementIrinked serversFailover serverRedundant serverServer settingsVideo panorama	Video devices		
Device groups IP address: None   Status Output IP address: None   Reports and Export Status: Not applicable   Communication Status: Not applicable   Security devices Status: Not applicable   Keyboards and Joysticks Imanagement   Users and Privileges Alarm management   Data management Imagement   Data management Imagement   Data management Imagement   Tasks Imagement   Linked servers Imagement   Failover server Redundant server   Server settings Video panorama			
Status   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Tasks   Linked servers   Failover server   Redundant server   Server settings   Video panorama		IP address: None	
Communication Security devices Keyboards and Joysticks Users and Privileges Alarm management Data management Data management Remote backup Tasks Linked servers P Failover server Redundant server Server settings Video panorama		Output IP address: None	
Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Remote backup   Tasks   Linked servers   Failover server   Redundant server   Server settings   Video panorama	Reports and Export	Status: Not applicable	
Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Remote backup   Tasks   Linked servers   Failover server   Redundant server   Server settings   Video panorama	Communication		
Users and Privileges Alarm management Data management Remote backup Tasks Linked servers Linked servers Pailover server Redundant server Server settings Video panorama	Security devices	×	
Alarm management Data management Remote backup Tasks Linked servers Failover server Redundant server Server settings Video panorama	Keyboards and Joysticks		
Data management Remote backup Tasks Linked servers Failover server Redundant server Server settings Video panorama	Users and Privileges		
Remote backup         Tasks         Linked servers         Failover server         Redundant server         Server settings         Video panorama	Alarm management		
Tasks         Linked servers         Failover server         Redundant server         Server settings         Video panorama	Data management		
Linked servers Failover server Redundant server Server settings Video panorama	Remote backup		
Failover server         Redundant server         Server settings         Video panorama	Tasks		
Redundant server       Server settings       Video panorama	Linked servers		
Server settings Video panorama	Failover server		
Video panorama	Redundant server		
	Server settings		
User interface settings v	Video panorama		
	User interface settings		

Following screenshot shows no failover server is assigned to this server software.

Following screenshot shows details about failover server when failover server is assigned to this server software and is online.

Secu	urity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
<ul> <li>▶</li> <li>♦</li> <li>♦</li> <li>♦</li> <li>♦</li> </ul>		V 14.07.11.01
192.168.0.64 🧳	Linked servers → Failover server	
Site_645A04A3DF13		<b>S</b>
Video devices	Assigned failover server details	
Audio devices	IP address: 192.168.0.64	
Device groups	if duices.	
Status	Output IP address: 192.168.0.64	
Reports and Export	Status: Failover server online.	
Communication		
Security devices	×	
Keyboards and Joysticks		
Users and Privileges	Failover data synchronization status	
Alarm management		
Data management		•
Remote backup	Status: 100 % completed.	
Tasks	Data volume: 15.65 MB of 15.65 MB completed.	
Linked servers	Files processed: 4 of 4.	
Failover server	Start time: 2014/07/17 16:41:50	
Redundant server	Last update: 2014/07/17 16:41:50	
Server settings		
Video panorama		
User interface settings v		

This shows failover server with output IP address 192.168.0.64 is assigned to this server and failover server is currently online.

Use

button to refresh failover server details.

Use

button to remove assigned failover server.

Failover 'data synchronization status' section shows details about data synchronized by the failover server. This happens when failover server has recorded data on main server's behalf when main server is offline at some time and when main server (this server software) comes online.

### 2.12.2 Redundant Server

This page shows the details about 'assigned redundant server' to this server application.

As the name suggests, 'Redundant Server' application is used for 'redundant processing' doing exactly same processing as the main server.

Redundant server is used in requirements where a copy of recorded data is needed at another physical location other than the main server location. So, in case there is any problem with the main server, data can be retrieved from the redundant server.

Secu	rity Management System - Server (User=admin,Privilege=Administrator)	×
▶ 😵 😵		V 14.07.11.01
192.168.0.64 🧳	Linked servers → Redundant server	
Site_645A04A3DF13		
Video devices	Assigned redundant server details	
Audio devices		
Device groups	IP address: 192.168.0.64	
Status	Status: Redundant server online.	
Reports and Export	×	
Communication		
Security devices		
Keyboards and Joysticks		
Users and Privileges		
Alarm management		
Data management		
Remote backup		
Tasks		
Linked servers		
Failover server		
Redundant server		
Server settings		
Video panorama		
User interface settings v		

This shows redundant server with output IP address 192.168.0.64 is assigned to this server and failover server is currently online.



## 2.13 Server settings

### 2.13.1 Import and Export

Application settings can be exported from this menu.



Use button to export current settings to a file. Application creates a single file which includes all the current settings for the software which later can be imported (if needed) using the steps mentioned in the 'Import configuration' section.

Use button to convert old exported settings to current format.

## 2.13.2 Resources

This page allows configuration of memory optimization, display optimization, video decoder optimization options which will be used by the application and to enable resource monitoring.

# These are advanced settings and should be done by trained engineers. Memory optimization policy should be used based on the deployment environment.

It is advised not to change these settings if you are in doubt about the selection of one of the option.

'None' option is the default and is expected to work in most of the deployment situations.

192.168.0.64   Site_645A04A3DF13   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Data management   Data management   Computer Maintenance   Server settings - Resources   Video Decoder Optimization   Mode:   Optimization   Besources   Preferences   Preferences <td< th=""><th></th><th>Security Management System - Server (User=admin,Privilege=Administrator)</th><th>- 🗆 ×</th></td<>		Security Management System - Server (User=admin,Privilege=Administrator)	- 🗆 ×
Site_645A04A3DF13   Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Quality:   High   Optimization   Innked servers   Video Decoder Optimization   Node:   Optimization   Node:   Optimization   Remote backup   Tasks   Linked servers   Video Decoder Optimization   Mode:   Optimized for up to 3MP video resolution (Advanced)   Video Decoder Optimization   Mode:   Optimized for up to 3MP video resolution (Advanced)   Preferences   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance	Image: wide wide wide wide wide wide wide wide		V 14.07.11.01
Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Quality:   High   Optimization   Innked servers   Server settings   Import and Export   Resources   Preferences   Preferences   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance	192.168.0.64	Server settings → Resources	
Reports and Export   Communication   Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Data management   Quality:   High   Optimization   Innect backup   Tasks   Linked servers   Server settings   Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance	Site_645A04A3DF13	Memory Optimization	
Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Data management   Data management   Coptimization   Inked servers   Linked servers   Video Decoder Optimization   Mode:   Optimized for up to 3MP video resolution (Advanced)    Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Playback)   Computer Maintenance	Reports and Export		2
Security devices   Keyboards and Joysticks   Users and Privileges   Alarm management   Data management   Data management   Data management   Quality:   High   Optimization   level:   Video Decoder Optimization   Mode:   Optimized for up to 3MP video resolution (Advanced)   Node:   Optimized for up to 3MP video resolution (Advanced)   Resources   Preferences   Preferences (Camera)   Preferences (Playback)   Computer Maintenance	Communication	Direly Orthologian	
Users and Privileges   Alarm management   Data management   Data management   Remote backup   Tasks   Linked servers   Server settings   Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance	Security devices	Display Optimization	
Alarm management   Data management   Data management   Remote backup   Tasks   Linked servers   Server settings   Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Playback)   Computer Maintenance	Keyboards and Joysticks	Mode: Optimized	0
Data management   Remote backup   Tasks   Linked servers   Server settings   Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance     Computer Maintenance	Users and Privileges		
Remote backup   Tasks   Linked servers   Server settings   Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance	Alarm management		
Tasks       level:         Linked servers       Video Decoder Optimization         Server settings       Mode: Optimized for up to 3MP video resolution (Advanced)          Import and Export       Resource Monitoring         Preferences       Enable Resource Monitoring         Preferences (Camera)       Delete Monitoring Logs After : 10         Preferences (Playback)       Computer Maintenance	Data management	Quality: High V	
Tasks   Linked servers   Server settings   Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance	Remote backup		
Server settings   Import and Export   Resources   Preferences   Preferences (Camera)   Preferences (Notifications)   Preferences (Playback)   Computer Maintenance     Enable Additional Logging	Tasks		
Import and Export         Resources         Preferences         Preferences (Camera)         Preferences (Notifications)         Preferences (Playback)         Computer Maintenance	Linked servers	Video Decoder Optimization	
Resources         Preferences         Preferences (Camera)         Preferences (Notifications)         Preferences (Playback)         Computer Maintenance	Server settings	Mode: Optimized for up to 3MP video resolution (Advanced)	
Preferences         Preferences (Camera)         Preferences (Notifications)         Preferences (Playback)         Computer Maintenance	Import and Export	Resource Monitoring	
Preferences (Camera)       Delete Monitoring Logs After : 10 Days         Preferences (Notifications)       Preferences (Playback)         Computer Maintenance       Enable Additional Logging		_	
Preferences (Notifications)       Preferences (Playback)       Computer Maintenance			
Preferences (Playback) Computer Maintenance Enable Additional Logging			
Computer Maintenance			
Enable Additional Logging			
		Enable Additional Logging	
Video panorama V	Video panorama		

### 2.13.3. Preferences

Secu	rity Management System - Server (User=admin,Privilege=Administrator) – 🗖 🗙
▶ 😵 📽 ▲ 本	
192.168.0.64 🧳	Server settings – Preferences
Site_645A04A3DF13	Virtual memory
Reports and Export ^	Restart application when low on virtual memory
Communication	Minimum free virtual memory: 448 MB
Security devices	Minimum free virtual memory: 512 MB
Keyboards and Joysticks	
Users and Privileges	System configuration
Alarm management	<ul> <li>Display system noulications window</li> <li>Enable minimize system notification window</li> </ul>
Data management	Enable daily settings backup     At Hour: 23
Remote backup	Log dient requests
Tasks	Enable remote configuration
Linked servers	Display application maintainance configuration
Server settings	Minimum video loss duration: 2 Minute
Import and Export	Use different minimum video un-available interval for detailed time line
Resources	Minimum video loss duration: 15 Seconds
Preferences	Processing priorities
Preferences (Camera)	Export video priority: Very high
Preferences (Notifications)	Data processing priority: Normal
Preferences (Playback)	
Computer Maintenance	Recording history priority: Very low
Video panorama 🗸 🗸	

This page allows to define more system options.

### Virtual Memory:

- **a.** Restart application when low on virtual memory when enabled the application's virtual memory is monitored and application is restarted when it reaches configured 'Minimum free virtual memory' limit.
- **b.** Notify low virtual memory: when enable the application's virtual memory is monitored and application will generate notification when it reaches configured 'Minimum free virtual memory' limit.

### **System Configuration:**

- a. Display system notification window: When unchecked application will not display system notification window.
   Enable minimize system notification window: When enable user can minimize the system notification window even if it is displaying notifications.
- **b.** Enable daily backup: when enabled takes back up of server configurations every day at configured time. It is recommended to keep this setting enabled.

- **c.** Log client request: when checked all client requests are logged to the database. It is recommended that you **should not enable/check** this option as it would be used internal purpose.
- **d. Enable remote configuration:** When enable application allows to perform control settings from another software using SDK.
- e. Display application maintenance configuration: When enable application will display configuration page for application maintenance under 'Server settings-> Application Maintenance'.
- **f. Minimum video loss duration:** You can define minimum video loss duration in minutes (2-60 minutes) which will be used by video search screen to display video data availability status.
- **g.** Use different minimum video un-available interval for detailed time line: If enabled video search screen will use this different threshold for minimum video loss duration for detailed time lines.

### **Processing Priorities:**

These are advanced setting and is used while processing data like archiving data, cleanup of data, and exporting videos to client applications and analyzing video recording history.

These operations use network bandwidth, I/O resources etc. resources and affect computer performance and which in turn may affect the software performance for normal recording and playback operations, if any of the resources hit the utilization limit. The data processing priority can be lowered to free up more resources for the normal operations, in such cases. *This is an advanced configuration and should be used only by trained engineers.* 

## 2.13.4 Preferences (Camera)

This page allows you to define camera specific settings.

Secu	rity Management System - Sen	ver (User=admin,Privil	ege=Administrator)	- 🗆 🗙
		🥸 💽	<u> </u>	V 14.07.11.01
192.168.0.64 🧳	Server settings → Preference	s (Camera)		1
Site_645A04A3DF13				
Reports and Export	Rendering mode:	CPU	¥	>
Communication	Camera connection:	RTSP	v	
Security devices				<b>1</b>
Keyboards and Joysticks	Support low bit rate se Enable adding multiple	-		0
Users and Privileges	Reset all cameras whe			
Alarm management	Allow video stream par			
Data management	Advanced RTP options	-		
Remote backup Tasks				
Linked servers		number for UDP sockets		
Server settings	Port validation:	Use camera de	fault v	
Import and Export	IP address validation	Use camera de	fault v	
Resources				
Preferences	Manual recording type			
Preferences (Camera)	Type: Opti	mized	~	
Preferences (Notifications)				
Preferences (Playback)				
Computer Maintenance				
Video panorama 🗸 🗸				

### **Rendering Mode:**

Camera Connection: Camera connections will be made using this option.

**Support low bit reate settings for camera:** only a few camera models support very low bit rate settings like 48 kbps. Hence the low bitrate settings are not displayed by default in the user interface for changing camera streaming parameters. If any project requires low bit rate setting for camera streams, this option can be enabled. However, since it depends on the camera – whether it supports low bit rates or not, the low bit rate settings should be verified. This is an advanced configuration and should be used only by trained engineers.



**Enable adding multiple cameras from same IP:** When enabled application allow adding same camera more than once in system.

#### Reset all cameras camers when communication error is observerd:

Allow video stream parameters change: If enabled application will allow to change video parameters fro camera.

#### **Advanced RTP Options:**

- a. Use exclusive port number for UDP sockets:
- **b.** Port validations:
- c. IP address validations:

Manual recording type:

## 2.13.5 Preferences (Notification)

\_ 🗆 🗙 Security Management System - Server (User=admin,Privilege=Administrator) • **•** 0 (A) OL V 14.07.11.01 192.168.0.64 1 Server settings → Preferences (Notifications) Site\_645A04A3DF13 Enable sound for notifications ~ Reports and Export 10 seconds ✓ Auto stop sound after Communication Sound File: C:\Program Files\Infinova\Security Man ... Security devices Keyboards and Joysticks Users and Privileges Alarm management Data management Remote backup Tasks Linked servers erver setting Import and Export Resources Preferences Preferences (Camera) Preferences (Notifications) Preferences (Playback) Computer Maintenance deo panorama

This page allows you to define settings for 'System Notifications' window.

**Enable sound for notifications:** When enabled application will start playing selected sound whenever there is new notification is generated in application.

Auto stop sound after: When enabled sound will stop playing automatically after configured seconds.

## 2.13.6 Preferences (Playback)

\_ 🗆 🗙 Security Management System - Server (User=admin,Privilege=Administrator) • **•** 0 (A) OL V 14.07.11.01 192.168.0.64 0 Server settings → Preferences (Playback) Site\_645A04A3DF13 Playback time settings 15 seconds Instant replay time: Reports and Export Communication Pre-bookmark playback time: 15 seconds Security devices 15 Post-bookmark playback time: seconds Keyboards and Joysticks Users and Privileges Alarm management Data management Remote backup Tasks Linked servers erver setting Import and Export Resources Preferences Preferences (Camera) Preferences (Notifications) Preferences (Playback) Computer Maintenance ideo panorama

This page allows you to define playback time settings.

**Instant replay time in seconds** – used at live video screens to start playing video from this configured seconds back of live video.

**Video bookmark playback time settings** – you can configure pre and post playback time (in seconds) for bookmarking the video. You can bookmark video from live or playback screen (use right click option).

### 2.13.1 Application maintenance

Se	curity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
▶ 😯 😵		v 14.07.11.01
192.168.0.64	Server settings – Application Maintenance	
Site_645A04A3DF13	Application autostart	
Communication	Restart application	2
Security devices	Start: 7/17/2014 v 1:00:00 🐳	
Keyboards and Joysticks		
Users and Privileges	Random time: 2 V Hours	0
Alarm management	Repeat frequency: 7 Days	
Data management		
Remote backup	Next Application Restart at: 24-Jul-2014::02:00	
Tasks		
Linked servers		
Server settings	۷	
Import and Export		
Resources		
Preferences		
Preferences (Camera)		
Preferences (Notifications)		
Preferences (Playback)		
Application Maintenance		
Computer Maintenance		
Video panorama	v	

From this tab, you can configure application restart details.

Check 'Restart application' option,

Provide start data and time from which application restart should work

Configured random time in hours (explained below) and

Repeat frequency in days (say x) means every x days at configured time.

Application will display 'Next application restart time' below.

You can test application restart feature with <sup>w</sup>button.

### **Random time:**

For security reasons, application has added random time feature so that application will get restarted **any time after configured time** (01:00:00 as per above screenshot) **within configured random time.** 

E.g. as per above screenshot, application will get on started on 24-July-2014 any time after 1:00:00 + 2 hours (random time). I.e. anytime from 01:00:00 to 03:00:00. So application restart time is difficult to guess and system will be more secure.

### 2.13.2 Computer maintenance

From this tab, you can configure auto-logging into computer when computer starts. Please configure 'Computer user' and password details' – that will be used to auto-login into the computer when computer restarts.

Sec	urity Management System - Server (User=admin,Privilege=Administ	trator) – 🗆 🗙
Image: Constraint of the second sec		2 () <b>- .</b> v 14.07.11.01
192.168.0.64	Server settings – Computer Maintenance	
Site_645A04A3DF13	Auto login	
Communication	Enable computer auto-login	k if this computer is
Security devices	Domain name: (Keep blank not part of	
Keyboards and Joysticks		ator user only)
Users and Privileges	Password:	0
Alarm management	Confirm password:	
Data management		
Remote backup	<ul> <li>Lock computer after autostart</li> </ul>	
Tasks	Delay auto-started application launch for: 10 second	ds
Linked servers		
Server settings	Machine reboot	
Import and Export	Periodic machine reboot	
Resources	Start: 7/14/2014 ¥ 12:00:00	
Preferences	Repeat frequency: 30 days	
Preferences (Camera)		
Preferences (Notifications)	Random time: 2 v hours	
Preferences (Playback)	Next Machine Reboot at: 13-Aug-2014::12:00	
Application Maintenance		
Computer Maintenance		
Video panorama 🛛 🗸		

Check 'Lock computer after autostart' – to lock it after logging into the system. After computer restart, application launch can be delayed by configured seconds.

Periodic machine reboot can be configured by enabling it. Please specify the start date, time repeat frequency and random time in hours.

E.g. from above screenshot, periodic machine restart is enabled from 13-Aug-2014. Machine will get automatically any time after 12:00:00 within 2 hour (random time). Frequency of machine restart is set to 30 days so the operation will happen every 30 days.

Use button to test computer reboot any time.



# 2.14 Video panorama

Video panorama settings can be done using this tab.

Se	curity Management System - Server (User=admin,Privilege=Administrator) – 🗖 💌
Image: Second	
New Office Building	
Video devices	
Audio devices	
Device groups	
Status	
Reports and Export	
Communication Security devices	
Keyboards and Joysticks	
Users and Privileges	
Alarm management	
Data management	
Remote backup	
Tasks	
Linked servers	
Server settings	
Video panorama	
Video panorama	
User interface settings	
L	

Click on 'Configure panorama' **s** button to popup configuration dialog.

Please see configuration dialog and details at below page.



### Video panorama configuration -

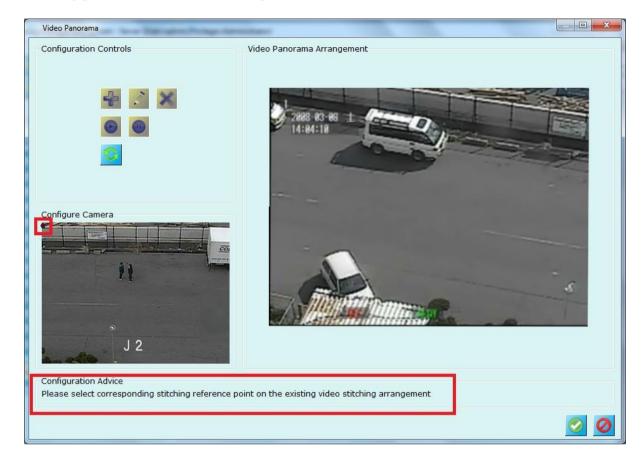
Configuration Controls	Video Panorama Arrangement			
		Select Camera		
	Camera Name:	Main Gate Entry		*
	Fish Eye Correc	tion Settings		
	Fish Eye	Lens Angle:	102	
	Perpespctive Co	orrection Settings		
onfigure Camera	Reference	e Horizantal Line Y Pos:	64	% height
	Point of P	erspective Origin X:	50	% width
	Point of P	erspective Origin Y:	-19.2999	% height
-	camera to the Video Stitching arr	angement		
onfiguration Advice 'lease click on 'Include Camera' button to add a	camera to the Video Stitching arr	angement		
-		-		Ø
lease dick on 'Include Camera' button to add a	n to popup camera se	election dialog.		

After adding two cameras, you need to select the common points from these cameras.

### Please use 'Configuration advice' for the next step to do.

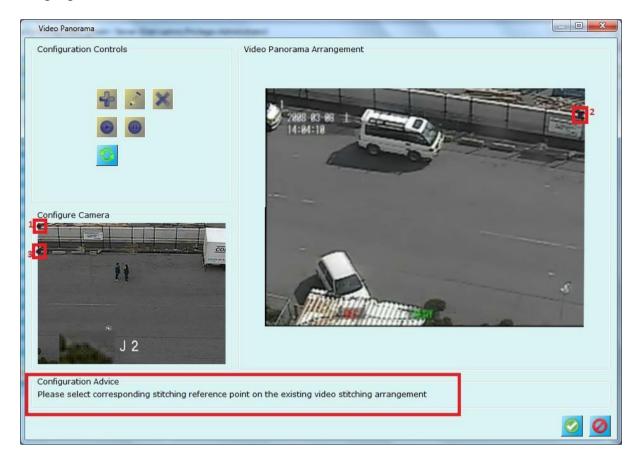
(Continued on next page...)

Following screenshot shows 2 cameras added to video panorama and first stitching point is selected to the 'Configure Camera image and now dialog is waiting for stitching point selection. (See 'Configuration advice').



(Continued on next page...)

Following figure shows corresponding stitching reference point (for reference point 1) is selected in 'Video Panorama Agreement' section (point marked 2 in the screenshot below). Then dialog asks to select second reference point in 'Configure camera' image (point 3 is selected in the screenshot below)



Now dialog is waiting for selection of corresponding stitching reference point on existing video stitching arrangement (mapping 3<sup>rd</sup> point other image). Once you select this point (in 4<sup>th</sup> point 'Video panorama arrangement'), the dialog will stich these two images as shown in figure below.

(Continued on next page ...)



Figure shows video stitching is done with 2 cameras and video panorama is played

using **W** button.

To include more cameras, click on pause button and follow same process as described for two cameras stitching.

### Please see 'Configuration Advice' always for expected next step to perform.

Once configuration is done, click on 'Okay' button to save the configuration. To play

this configured panorama, use button present on main application toolbar.

# 2.15 User interface settings

This section lets you define parameters related to look and feel and easiness of using this Software.

### 2.15.1 Alarm settings

Se	ecurity Management System - Server (User=admin,Privilege=Administrator)	- 🗆 🗙
<ul> <li>Solution</li> <li>Solution&lt;</li></ul>	Image: A state of the settings         Image: A state of the settings	V 14.07.11.01
Reports and Export	Alarm type indicator	
Communication	Log:	2
Security devices		<b>.</b>
Keyboards and Joysticks	Warning:	
Users and Privileges	Alarm:	0
Alarm management		
Data management	Alarm acknowledgement window type	
Remote backup	ODetailed	
Tasks	Compact	
Linked servers		
Server settings	Add motion detection alerts to alarms list	
Video panorama	Add no motion alerts to alarms list	
User interface settings	Add 'Delay in writing video data' alarm to alarms list	
Alarm settings	Enable object counting alerts	
Display settings	$\checkmark$ Auto close alarm acknowledgement window when no active alarms exist	
Map settings	Add object counting logs to external DB	
Overlay settings		
Language settings		
	v	

Configure alarm type indicator colors, above screen shows the defaults and currently used colors by the application.

Alarm Acknowledgement window type can be 'Compact' which only shows alarm details with acknowledge button or 'Detailed' which shows alarm information with live video and alarm video with acknowledgement window.

Detailed window also has playback control options to control alarm playback. You can start separate playback screen from this detailed window and also export alarm video. Please see below page for 'Compact' and 'Detailed' alarm acknowledgement windows.

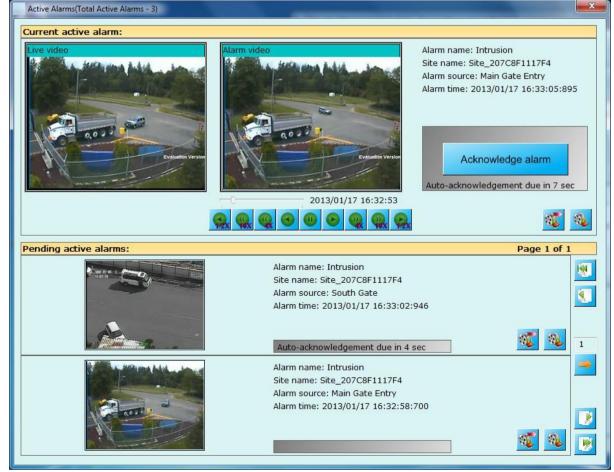
Check 'Add motion detection alerts to alarms list' to enable adding 'Motion detection' alarms to the alarms database. Un-checking the option does NOT disable motion detection and processing, but only disables adding the motion detection alarms to the database. Typically, there will be many 'motion detection' alarms generated in any video camera mounted in normal location for monitoring activities. Adding these

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com

alarms to the alarms database may not be useful, since these are generated very frequently and the reports will not provide any good understanding of the situation. But at the same time motion detection needs to be ON when video recording is configured as 'alarm based'



### Alarm Acknowledgement window (Detail) -



SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com



#### 'Add no motion alerts to alarm list'

#### Add 'Delay in writing video data' alarms to alarms list

**Enable object counting alerts enable** to enable adding 'Object counting' alarms to the alarms database. Un-checking the option does NOT disable motion detection and processing, but only disables adding the motion detection alarms to the database. Application will continue display details of object counting on video.

**Check 'Auto close alarm acknowledgement window when no active alarm exist'** to auto close alarm acknowledgement window when there are no active alarms in system.

Check 'Add object counting logs to external DB' to add object counting logs to external MYSQL database.



### 2.15.2 Display settings

Configure video or application display related parameters from this user interface.

	Security Management System - Server (User=admin,Privilege=Administrator) – 🗖 🗖
<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li></ul>	
192.168.0.64	💦 User interface settings – Display settings
Site_645A04A3DF13	Ask for system optimization recommendation
Reports and Export	Ask confirmation while closing video display
Communication	Display square pixels
Security devices	<ul> <li>Display square pixels</li> <li>Display square pixels for panorama view streams</li> </ul>
Keyboards and Joysticks	Display view count across video screens
Users and Privileges	Initialize high resolution video using default video
Alarm management	Remember 'Control window' tab selection for every video container
Data management	Video screen settings
Remote backup	Max cameras for live video screen 1: 8 X 8
Tasks	High resolution video window settings
Linked servers	Full screen     Use resolution     640 X 480     pixels
Server settings	
Video panorama	Display resolution selection threshold: Normal video:
User interface settings	High resolution video:
Alarm settings	
Display settings	Tree control channel list: Display Site Name
Map settings	Enable video window viewing
Overlay settings	✓ Hide recording history tab
Language settings	Show error status for CCTV keyboard commands Auto-close in: 3 seconds
	Switch to `Show UI' mode when ESC button is pressed while in `Hide UI' mode

#### Ask system optimization recommendation -

It is advised or recommended only to setup the system at server machine and not use this system for viewing live video screens, playing back history data etc. For these features, user can connect client application from separate machines and use it. Server is expected to record the video channels, run analytics and more expensive operations. This way server can run with full resources and can support many video channels.

When checked 'System optimization recommendation', server application will ask for closing all the auxiliary windows (live, playback, search etc. – discussed later) after some time. You can turn ON/Off this feature using check box.

Ask confirmation while closing display – when checked application will ask for confirmation while closing any video display. You can turn it off if do not need this popup.

**Display square pixels** – when unchecked application displays video such that complete display area is covered by the video. The original aspect ratio of the video (video width: video height) is ignored during the display, in this case. This may result in stretching of the video horizontally or vertically. If this option is checked, application always displays video maintaining its original aspect ratio. The application adds black color bands (horizontal or vertical) to fill up the difference between the aspect ratio of the video and the aspect ratio of the display area,

**Display video count across video screens** – when checked application displays total number of videos being displayed to all the video windows tree control information.

#### Video screen settings

**Max cameras for live screen 1:** you can define maximum cameras that live screen 1 can display using this edit box.

#### High resolution video window settings

You can configure high resolution window size or you can select 'Full screen' option so that high resolution window will occupy all screen area when it is being viewed.

High resolution window can be popped up/ displayed by double-clicking on any video or right clicking video and clicking 'Full screen' menu.

### Display resolution selection threshold

When 2 separate display streams are selected for any channel, Security Management System chooses the best one to display video on any target video window. This helps in lowering the resource utilization considerably. E.g. displaying 1.3 megapixel (1280 X 1024 pixels) video in 320 X 240 pixels size display window is not useful, since it consumes resources for full 1.3 megapixel size but ultimately the output video is only 320 X 240 pixels. Hence displaying 320X 240 size video would always be beneficial, as the visible output video quality remains the same in both cases, but resources utilization is much lesser. Security management System uses this principle to select the best matching stream for display. 'Display resolution selection threshold' parameter is used during the decision making for using lower resolution stream or higher resolution stream.

You can define this settings for 'Normal video' and 'High Resolution' video separately.

#### Enable video window viewing

When enabled application will display buttons for live, playback, analytics and map view.

Video viewing is CPU intensive operation. Many of the server hardware's do not have graphics card installed on them. In this case, video display takes lot of CPU usage and may affect working of the 'Security Management System' server software.

Hence it is recommended not to configure any video viewing in the server software. By default video viewing is disabled in the server software (deployment version). However in this step, it is advisable to reconfirm that no video viewing is enabled in the server software.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide <u>www.smart-vms.com</u>



#### Hide recording history tab

When enabled application will display recording history tab on live and playback video screens tab control.

#### Show error status for CCTV keyboard commands

When enabled application will display error message window when CCTV keyboard working encounters any problem. It will be auto closed after configured interval.

#### Switch to 'Show UI' mode when ESC button is pressed while in 'Hide UI' mode

When enabled, application will use ESC command to switch to 'Show UI' mode form 'Hide UI' mode for live and playback video screens.



### **Reset all window positions**

Use this button to reset all windows position.

# Display preconfigured video screen



This button will popup video screen where you can configure window layout and videos. When the generated alarm is configured to popup pre-configured window, this window will be opened/popped up with the setting you do.



### 2.15.3 Map settings

This page allows you to configure map settings.

Se	curity Management System - Server (User=admin,Privilege=Administrator) – 🗖 🗙
<ul> <li>(2)</li> <li>(2)</li> <li>(3)</li> <li>(4)</li> <li>(4)</li> <li>(4)</li> </ul>	V14.07.11.01
Site_645A04A3DF13	
Reports and Export	Double clicking action: <u>View in video viewer</u>
Communication	
Security devices	Embedded video size: 120 X 90 pixels
Keyboards and Joysticks	High resolution video size: 640 X 480 pixels
Users and Privileges	
Alarm management	
Data management	
Remote backup	
Tasks	
Linked servers	
Server settings	
Video panorama	
User interface settings	
Alarm settings	
Display settings	
Map settings	
Overlay settings	
Language settings	
	v

**Double clicking action:** This will define how video is displayed when user double clicks on any item in map window. Options includes View video embedded on map, view high resolution window or view in video viewer.

**Embedded video size:** This settings will be used to configure size of video embedded on map window. The size is defined in pixels.

**High resolution video size:** This settings will be used to configure the size of high resolution video window. The size is defined in pixels.

## 2.15.3 Overlay settings

Sec	curity Management System - Server (User=a	dmin,Privilege=Administrator)	
<ul><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li><li>►</li></ul>		• •	V 14.07.11.01
192.168.0.64	User interface settings → Overlay setting	IS	
Site_645A04A3DF13	Text color settings		
Reports and Export	Text color:		2
Communication	Normal video	High resolution video	
Security devices	Show camera name	Show camera name	
Keyboards and Joysticks	Show time stamp	Show time stamp	Ø
Users and Privileges	Show IP address	Show IP address	
Alarm management	Show IP address	Show bit rate	
Data management	Show EPS	Show EPS	
Remote backup	Show video resolution	Show video resolution	
Tasks	Show video recording state	Show video recording state	
Linked servers	Show audio play state	Show audio play state	
Server settings	Show no audio indicator	Show no audio indicator	
Video panorama	Show camera PTZ location	Show no addio indicator	
User interface settings			
Alarm settings	Motion detection settings		
Display settings	Overlay mode: Full display	×	
Map settings	Other settings		
Overlay settings	✓ Display video overlay indicator	for video disconnection	
Language settings	✓ Display video overlay indicator	for offline camera	
	·		

You can configure overlay settings using this tab.

Text color – color used while displaying overlay texts.

Overlay - normal videos -

Show camera name, timestamp, IP address, bit rate, FPS (frame rate), video resolution, video recording state, audio play state, no audio indicator, and camera PTZ location can be enabled or disabled to overlay it on videos.

Overlay - high resolution videos -

Separate overlay settings can be configured for 'High resolution videos'

Motion detection overlay mode can be one of the

- 'No display' no overlay will be done for motion area.
- 'Motion indicator only' displays small rectangle at left bottom when there is motion in the scene.
- 'Motion grids only'- displays grid on the video where there is a motion.
- 'Full display' displays both motion indicator and grids on video when there is motion in the scene

Other settings

Display video overlay icon when there is video disconnection (displays cross mark)
Display video overlay icon when there is server disconnection (displays cross mark in a circle).



### 2.15.4 Language settings

Application has built in support for various languages. You can choose your language from this section.

	Security Management System - Server (User=admin,Privilege=Administrator) – 🗖 💌
▶ 😵 ♦	
192.168.0.64	✓         User interface settings → Language settings
Site_645A04A3DF13	2
Reports and Export	Current Language: English/English
Communication	Select Language: 日本語/Japanese y
Security devices	Select Language: 日本語/Japanese v English/English
Keyboards and Joysticks	☑ Log missing texts দিন্দা/Arabic বাঙ্গালী/Bengali
Users and Privileges	български/Bulgarian ease 🗹
Alarm management	català/Catalan      中国简体/Chinese Simplified
Data management	中國傳統/Chinese Traditional hrvatski/Croatian
Remote backup	český/Czech český/Danish
Tasks	Nederlands/Dutch
Linked servers	eesti/Estonian Pilipino/Filipino
Server settings	suomi/Finnish francais/French
Video panorama	Deutsch/German ελληνικό/Greek
User interface settings	kreyòl ayisyen/Haitian Creole
Alarm settings	עברית/Hebrew हिन्दी/Hindi
Display settings	Hmoob Daw/Hmong Daw magyar/Hungarian
Map settings	Indonesia/Indonesian Gaeilge/Irish
Overlay settings	italiano/Italian
Language settings	日本語/Japanese そう、ほ/Kannada
	한국어/Korean
	Latviešu/Latvian Lietuviu/Lithuanian

This tab shows current language used by the application.

To change select the language and click on to save the settings. Please note that you need to restart the application to apply newly selected language. Such message is displayed below the 'Select language' option.

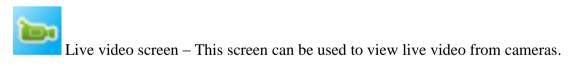


### 3. Views

The 'Security Management System Server' provides several viewing screens which can be viewed simultaneously. All the screens can be moved independently and hence can be viewed on different display devices / monitors connected to the computer.

	Security M	Managem	ent System - Ser	ver (User=admin,	Privilege=Adn	ninistrator)		
▶ 😔 ३ ३	-			*** •	P	6		.4.07.11.01
192.168.0.64	🧪 Vi	ideo device	es → Channels					
Site_645A04A3DF13	2	کے لیے	<b>5</b> 💦 💉	<b>a</b> 🗙 🕕	<b>0</b> B== 1	2	<u>00</u> 00	
Video devices	^		<u>۳</u>	Y	10 0 4			
Channels		Sr No.	Channel Name	Channel ID	Description	Video Stream Type	Parameter	
Main Gate Entry		1	Main Gate En		Cam097	Video Clip	E:\Softwar	
South Gate		2	South Gate	VC_South Gate	Cam098	Video Clip	E:\Softwar	
Sequences								
Audio devices								
Device groups								
Status								
Reports and Export								
Communication								
Security devices								
Keyboards and Joysticks								
Users and Privileges								
Alarm management								
Data management								
Remote backup		<						<b>.</b>
Tasks		•					>	<u> </u>
Linked servers								
Server settings	~							

## 3.1 Toolbar buttons





Playback video screen – This screen can be used to view recorded data from cameras. All cameras in this screen will display synchronous playback.



Non sync playback video screen – This screen can be used to view recorded data from each camera separately Playback for each camera can be managed separately in this screen.





Map screen – this displays the 2D map image and locations of cameras on the image. It is possible to view live video on the map image location. It is also possible to highlight any generated alarm directly on the map screen.



Analytics screen – shows analytics streams for all configured video channels.



Export video screen – allows you to export video in standard or native format.



Video panorama screen shows panoramic view for configured video channels.



Alarms screen, the list of alarms generated in current session of application.



Active alarms screen – list of shows all active alarms in the system.



Search screen – this can be used to search for alarms by time and channel ID. It can also be used to export any duration of recorded video to a standard format.



User logs screen – this can be used to search for user activity logs by time and user ID. It also shows the user activity logs for the current session.



Video bookmark search screen - used to search bookmarked videos.



Video search screen – Will be used to launch 'Video search screen' where you can analyze recorded data availability from cameras over the period of time using 'Security Management System'.



Offline data viewer, a separate player application to view application's offline

data

License information - shows license information of the software



Help – pop-ups this file.



About - displays manufacture's name, company and copyright information



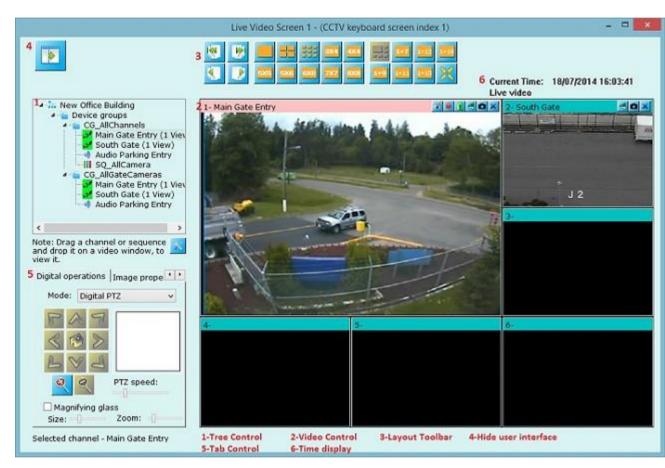
Lock server – closes all windows except main screen window and locks the system. To access the system again, you need to unlock it using the password of logged in account.



### 3.2 Live Video screen

Application provides one live video screen where you can view live feed from cameras

Click on button to open video screen.



Screen title bar will show screen number and CCTV keyboard index for opened video screen.

Details about each user interface control are below.



### 3.2.1 Tree control

Tree control displays a root node as 'Site' node. It shows site ID and below site id node, camera groups that are authorized for currently logged user are displayed. Camera group nodes have sub nodes to all the camera names that are present inside the camera group and camera sequences.

To view camera video or camera sequence video, user drags the camera name or camera sequence name and drop to the 'Video control' (refer 3.2.2 or refer point **2** from screenshot).

Alternatively you can also double click on camera name or camera sequence name from tree control to view the video into video control.

You can also right click on video container and click on 'Assign video channel' or 'Assign video sequence' to view videos.

### 3.2.2 Video control

Video control displays videos from camera or sequence of cameras. It has number of items (same sized or different size depending upon layout used) – called as 'video containers'.

You can right click on the video container for options related to video container or video displayed inside video container.

Selected video channel or sequence is highlighted with RED colored title bar and you can apply features available on 'Tab control' (point **6** from screenshot above) on this selected video or sequence.

### **3.2.3 Layout toolbar**



Using buttons available on layout toolbar, the 'video control' appearance can be changed. Figure above shows that video control currently is in 1+5 mode i.e.1 (first) video container is large sized and rest 5 are small-equal sized.

Other available modes are 1x1, 2x2, 3x3, 3x4, 4x4, 5x5, 5x6, 6x6, 7x7, 8x8, 1+7, 1+9, 1+11, 1+12, and 1+16.

Click on these buttons to apply layout modes.

Left hand side 4 buttons can be used to move to first page, last, previous page, next page within current used layout.

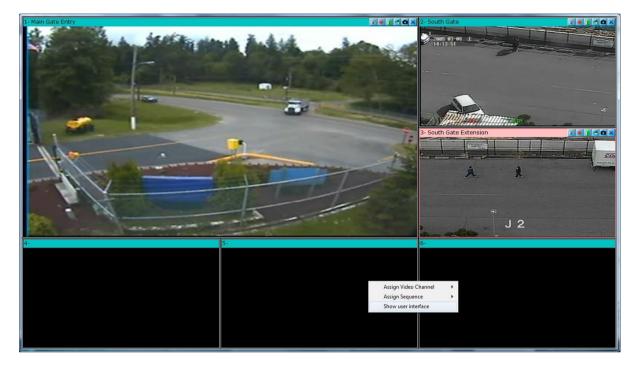


Button gets all the video displays linear with no vacant video windows in between.

### 3.2.4 Hide user interface

-				
		2		
	3	v		

This button **the screen** to show only 'Video control' and the screen will look like



To show user interface controls, right click on any video container and click on 'Show user interface' menu.



#### **Tab control**

The tab control contains many features categorized into sub tabs. The features from the tab control will work on selected camera or camera/video sequence. Name of currently selected camera/sequence is displayed below this tab control. Also, selected camera/sequence is displayed in RED colored title bar in the 'Video control'

### 3.2.5 Tab - Camera PTZ

This tab shows camera PTZ controls when camera PTZ is supported by the camera and user has selected camera PTZ option from 'Video details page'

Camera PTZ Digita	
	Focus : Iris : Iris :
PTZ speed:	

### 3.2.7 Tab - Digital PTZ

This tab works in one of the 3 available modes (Digital PTZ mode, Digital Auto tracker mode, or Vibration removal mode)

#### **Digital PTZ mode-**

The selected video display can be controlled using digital PTZ controls.

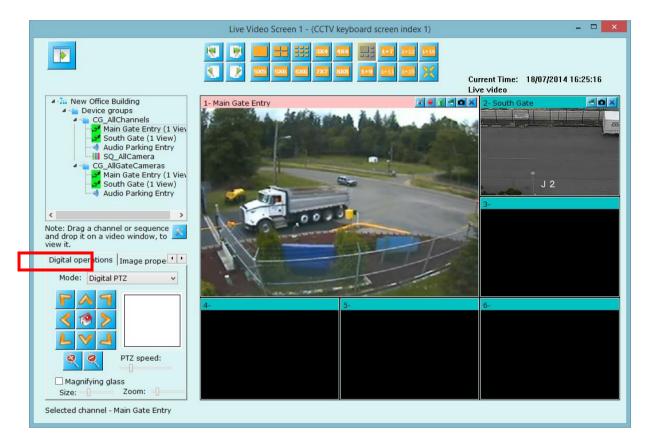
Use PTZ buttons from this tab to zoom, pan, and tilt the video. For different PTZ speeds, use 'PTZ speed' slider bar.

For PTZ using mouse move, drag and scroll, right click on video and use 'Display mode – Digital PTZ' menu.

PTZ area display indicator shows which part of video is being displayed on the screen.

Magnifying glass when enabled will magnify the area when mouse pointer is moved to the selected video display. Magnifying glass parameter (glass size and zoom) can be controlled using slider bars.

Screenshot below shows digital PTZ applied on 'video container 1' (1-Main Gate Entry), also applied magnifying glass is shown (see 2 in image). For comparison with normal video, see video from 'video container 4' (4- Main Gate Entry) which shows normal live video for same camera.





#### Digital auto tracker mode

From tab control, select operation mode to 'Auto Tracker'. Enable auto-tracking with the checkbox present on the tab. This enables the digital auto tracking feature. The application detects the objects in the scene, selects the best object, tracks it and auto-tracks it such that the output display window is always focused on the target object.

#### This feature is specifically useful for mega-pixel cameras, where the operator would like to view the objects and track them automatically without needing any user interaction.

Please note that, this feature is specific to a display window, hence it is possible to have 2 views of same camera – one with digital auto-tracking enabled and the other one as normal view of the camera.

Enabling this feature has no effect on the recording or any other configurations done for the video channel, since it applies only to a specific display window and not the original video stream from the camera.

**Figure below illustrates the auto tracking of a vehicle** – where left hand side video display has auto-tracking enabled and right hand side display shows same video feed without any processing.



Use 'Analytics settings' button *to change auto-tracking parameters*.



#### Vibration removal mode -

From tab control, select operation mode to 'Vibration removal'. Enable vibration removal with the checkbox present on the tab. When enabled, vibrations in the video feed will be removed to have stable, vibration-free video view.

Please note that, this feature is specific to a display window, hence it is possible to have 2 views of same camera – one with vibration removal enabled and the other one as normal view of the camera.

Enabling this feature has no effect on the recording or any other configurations done for the video channel, since it applies only to a specific display window and not the original video stream from the camera.



### 3.2.8 Tab - Image properties

Image properties such as brightness, contrast, sharpness, color adjustments etc. for the selected camera can be controlled using this tab. This feature is camera dependent.

Color :	Color 🗸
Brightness :	▲ 🔻 🔗
Contrast :	▲ 🔻 🔗
Saturation :	▲ ▼ 🔗
Sharpness:	▲ 🔻 🔗
Hue/Color:	▲ 🔻 🔞

### 3.2.9 Tab – Presets

s.	Preset name	
1	Home	
2	WaterTankPo	· · · · ·
3	NewPreset	
		Home
•	4	

Selected camera - Main Gate Entry

This tab lists configured presets for selected camera. Click on any preset name from the list to select it. Its snapshot image will be displayed at right hand side.

Click on button to go to selected preset. Command will be sent to the camera which will be moved to the selected preset position.



Note - to configure presets, please refer to 'Camera PTZ configuration'

### 3.2.10 Tab – Tours



This tab lists all configured tours for selected camera.

Select any tour from the list and click on <sup>40</sup> button to start tour.

Click on **to** stop currently started tour.

Click on button to popup a dialog box which displays details about the selected tour. It lists all the presets used for the tour and their dwell time.

#### Note - to configure tours, please refer to 'Camera PTZ configuration'

### 3.2.11 Tab - Video source

This tab shows connection details for the selected camera.

video	source i	nfo		
Site I	D: Site_2	207C8F	1117F4	
Video	Source	Type: V	ideo Cl	ip
Displa	ay Resolu	tion: 3	20x240	pixels
	ding Res			A 1- A Description of the later
	clip path			

#### Selected camera - Main Gate Entry

### 3.2.12 Tab - Layout profile and sequences

User can configure and save different layouts using this tab. By default application adds 'LP\_Default' profile, which you can modify but cannot delete.

The combo box below displays configured layout sequences for opened screen. Changing combo box selection will switch layout to selected layout profile or sequence.

Layout profile and sequences:
LP_Default
4 4 × ×
<li></li>

To add new layout profile, click for button. This pops up a dialog box.

Add New Layout Pro	ile	×
Layou	profile ID:	
LP_	Layout001	

Enter layout profile ID and click on 'Add' button to add new layout 'LP\_Layout001' into the screen. The screen now will automatically switch to newly added layout (LP\_Layout001 in this example). By default video control will be in 1+5 mode with no videos assigned to any video containers. (Please see screenshot below)

You can switch to any layout mode using 'Layout toolbar' buttons. You can assign cameras or sequences to video containers, by right-clicking video container and following add menus or dragging cameras or sequences from tree control and dropping it on video containers.

Live Video Screen 1 - (CCTV keyboard screen index 1) 🗆 🗙 3X4 4X4 ... 1+12 M Current Time: 18/07/2014 16:30:35 Live video New Office Building ew Office Building Device groups CG AllChannels Adain Gate Entry Audio Parking Entry III SQ AllCamera G AllGateCameras Main Gate Entry Audio Parking Entry Audio Parking Entry Note: Drag a channel or sequence and drop it on a video window, to view it. Video source Layout profile Layout profile and sequences: Layout Profiles ¥ ---- Layout001 ~ 🕂 🏠 🦆 🔍 🕕 🕑 Note: Configurable layout profile No display allocated.

Layout automatically gets saved.

(Screenshot – blank video containers when new layout (LP\_Layout001) is added)

Use same steps to add more layout profiles.

Click on **Solution** button to remove current layout. Screen will automatically switch to next layout from the list.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com

#### Layout sequences -

Layout sequences can be defined using **button**. Layout sequence consists of number of layouts with dwell time associated with each layout. Layout sequence displays each configured layout for configured dwell time (in seconds) and switch to next layout in the sequence. Layout sequence will keep switching until user switches screen to some other configured layout sequence.

User can pause layout sequence any time while it is being executed using button

Once layout is paused, and buttons will get enabled so that user can use them to move to previous layout in a sequence or next layout in a sequence respectively.

Use buttons to edit and close currently running layout respectively.



### 3.2.13 Time display

Current Time: 18/01/2013 14:21:43 Live video

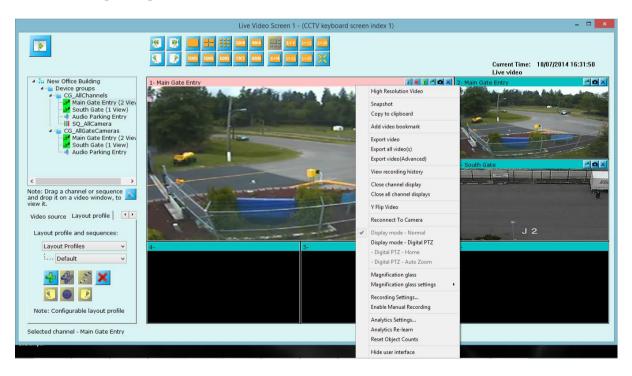
Screen displays current time continuously.

When application is in live view mode, then 'Live view' is displayed below the current time.

When application is in 'Instant replay' or 'Playback mode' then video time is displayed below the current time.

### 3.2.16 Right click options (Live video)

When screen is in live view mode, right click on any video container which displays the video for quick option.



**High resolution video** – opens separate window with selected camera displayed into it. The size of High resolution video window can be configured from 'User interface->Display settings' tab.

**Snapshot** – pops up a dialog to specify snapshot ask path **and** takes current snapshot of the video. There is an option to take snapshot for all the videos currently being viewed in this window.

Snapshot	~	×
Snapshot diretory :	E:\Snapshots\ age for all viewed channels in this screen	<u>~</u>
Jave snapshot in		0

Application displays a result dialog box which mentions success or failure for snapshot operation(s). If failed, it shows failed camera names and their reasons.

**Copy clipboard-** The video data will be copied to clipboard memory and can be directly pasted in other application like MS Paint.

Add Video Bookmark	Statement and	×
	Main Gate Entry	
video time:	18/01/2013 16:08:15	
Comment:	Vehicle Entered	
	<u>≁</u>	

Add video bookmark - pops up following dialog box.

It asks to add comment to the bookmark and clicking on **to** button will save video bookmark with added comment and video time.

Later user can search bookmarked videos using 'Search video bookmark'

screen for quicker access to specific important video time.

**Export video** – opens an export video dialog box starts exporting currently selected video channel using settings configured in 'Reports and Export-> Default video export settings' tab. User needs to stop video export manually as per their choice.

**Export all videos** – exports all video displays simultaneously using default video export settings. User needs to stop video export manually as per their choice.

**Export video** (Advanced) – Open export video screen and initializes parameters with currently selected video channel. User and change export parameters as per his need and start video export.

**View Recording History** – Open 'Video Search Tool' application which can be used to analyze the recorded data history for selected video channel.

**Close channel display** – asks user confirmation about closing video display (if enabled from 'User interface settings -> Display settings' tab) and closes the display if asked to.

Close all channel displays - closes all displays in current screen

Y flip video – flips video display in y-direction. I.e. make video display up-side down

Reconnect to camera – disconnects the camera and reconnect it again immediately.

**Home** – this menu will be visible when 'Camera PTZ' display mode is used (discusses later). Clicking on this menu will move camera to home position. Home position is defined as preset.

**Camera control** – this menu is visible if camera PTZ is available from the camera and is enabled by the application from 'Video channel details' page. This pops up a separate window containing playback control. This is additional dialog just for better user controlling the system. You can use this window to control the camera.

#### **Display modes**

**Display mode** – **Normal** – it is a mode which disables all mouse operations to control video stream. **Mouse cursor will be normal mouse pointer.** 

**Display mode – Digital PTZ –** when enabled, you can do digital PTZ operations using mouse on the selected video container. **Mouse cursor is changed to standard 'hand' cursor.** Mouse scroll can be used for zooming in and out of the video; mouse click-and-drag can be used for panning and titling the video display.

**Display mode – Camera PTZ –** when enabled, you can control camera PTZ operations using mouse on selected video camera. **Mouse cursor is changed to blue colored arrows.** Use mouse scroll for zooming in and out of the camera; use direction arrows (cursor changes as per current mouse position inside video container) for panning and tilting the camera.

**Camera PTZ speed** – used while doing camera PTZ using 'Display mode - Camera PTZ' mode.

**Magnification glass** – can be enabled from this menu (functionality described earlier), when enabled parameters can be configured using **'Magnification glass details'** menu.

**Recording setting** – pops up recording setting dialog where you can update recording plan if needed. Recording plan is already described in 'Quick setup' section.

**Enable manual recording** – when enabled, application will start recording videos overriding current recording setting for the selected video until you disable it using same menu.

**Analytics Settings** – Pops up analytics settings dialog where you can update analytics settings for selected video channel.

Analytics Re-learn – Will reinitializes analytics settings for selected video channel.

**Reset Object count** – Will reset video analytics object count.

**Hide User Interface** - to hide all configuration user interface controls from the screen to show only 'Video control'.

### 3.2.17 Video toolbar

1- Main Gate Entry

Video toolbar provides quick access buttons for accessing features.

- 🞽 Close video display.
- **D** Take snapshot
- Y flip video
- **Recording settings**
- Enable manual recording
- Analytics settings

💰 🗧 👔 🥌 🗰 🗙

### 3.3 Playback Video Screen

Application provides one playback video screen where you can view recorded video from video channels.

Click on 'Show playback video screen'



button to open playback video screen



#### Video playback time configuration controls



Configure playback date and time using these controls and click on to start playback from the configured time. Please note that all videos will start playback from configured time and will always display videos synchronously.

Buttons can be used to modify date and time by the selected options (Minute, Hour, or day).

#### Video playback control toolbar



These are playback speed controls, from live mode you can start playing videos with 1/2X (half speed) or (quarter speed), or take the screen to reverse playing mode with 1X, 4X, 16X, or half, quarter X modes.

SmartVMS<sup>TM</sup> Security Management System Server – User Guide <u>www.smart-vms.com</u>



Frame by frame playback buttons 🧠 🧠 will be enabled when playback is paused. These buttons will enable frame-by-frame playback in forward or reverse direction. Each time you click one of the button, screen will show next or previous frame. This gives finer control over playback. Please note – these button will work on single video (selected video) only and while doing the operation it will ask you for the confirmation for switching layout to 1X1 mode with selected video container.

Right click on video container when screen is in playback mode to see playback quick menus.

Snapshot – snapshots current or all videos being displayed as per users' inputs. Add video bookmark – (already discussed in 'Right click options (Live video)' above) Y flip video – make video display upside down.

Export video – exports currently video from current 'Video time' until user stops it. Export all video(s) – same as export but it exports all videos simultaneously. Close display – Closes video display.

#### **Instant Replay**



When screen is displaying live videos, user can switch screen to 'Instant replay' mode by clicking on this button. All the videos will show replayed video. Time (in seconds) from how much history time the screen should start displaying replay video can be configured from 'Server settings -> Preference (Playback)).

Once screen is in 'Replay mode', you can use buttons from playback control toolbar to better navigate through replayed video.

(Playback control toolbar is discussed later)



#### Live view button -

(Not shown in screenshot as screenshot is of 'Live video' mode) When screen is in 'Replay mode', this button will be displayed. Clicking on this button will take screen to live view mode to display live video feeds from all configured cameras.

### 3.4 Map screen



button) helps to understand overall current status of the entire Map screen ( area under surveillance in a single screen.

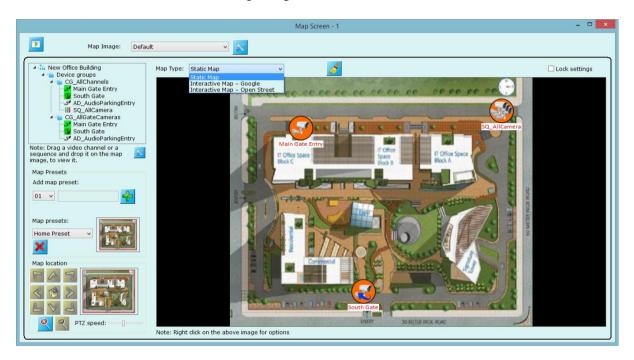
Application support different modes to map screen - static map, google map, and street map.

### 3.4.1 Static map (2D image)

This mode works with static 2D images (.bmp or .jpg).

Operators can load new map image by right clicking onto map image and selecting **'Change map image'** menu. User can select bmp or .jpg image and application will change map image to the selected one.

Video channels and/or sequences listed at top left tree control can be **drag-dropped** to the desired location inside the map image.



There are **two states** of the devices on the map – **compact state** which shows the position of the video device or sequence. The default indicators are as,



Will indicate static video channel position on map.



Will indicate PTZ video channel position on map.



Will indicate sequence position on map.

SmartVMS<sup>™</sup> Security Management System Server – User Guide <u>www.smart-vms.com</u>





Will indicate security device position on map.



Will indicate 'Quick access link' position on map.



Will indicate 'Quick access link zone' on map.

**Enlarged state** – where map can show the actual live video from the device. User can toggle between these state by using right click option and select desired display mode (Video or Icon).

**User can move the placed** video devices/ sequences/security devices anytime using mouse to adjust their position in the map image.

To view 'High resolution video' for any video channel double click on video channel in map.

Right click on map you can see various option as follows,

Change map image – To change current map image with different map image.

**Display Settings** – This will popup dialog where you can configure various display settings for map screen. These settings includes selecting configuring icons for static camera, PTZ camera, Quick access link, Video Sequence, Security Device, Quick Access Link Zone.

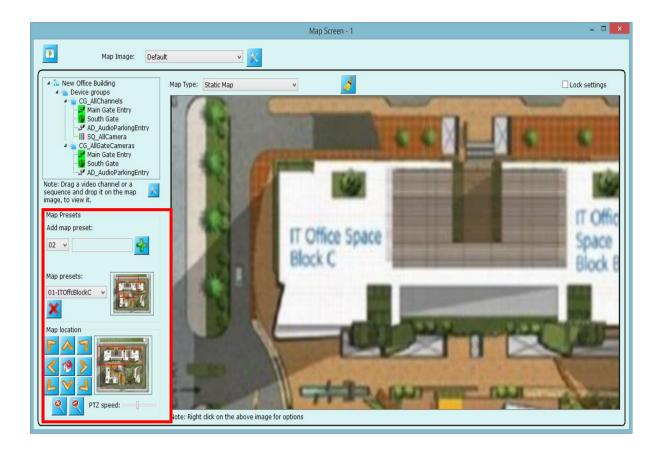
You can also configure the text font and background which displays the name of video device/sequence/quick access link on map. It is placed below the icon on map.

This dialog also allows you to configure 'Field of View' settings, these settings are described later in more detail.

Мар	Display Settings				
Images					
Static Camera:	Map_Camera_Static.png 🚱 📝				
PTZ Camera:	Map_Camera_PTZ.png 😡 📝				
Quick Access Link:	Map_QAL.png				
Video Sequence:	Map_Sequence.png 🧐 📝				
Security Device:	Map_SecurityDevice.png 🛑 📝				
Quick Access Link Zone:	Map_QAL_Zone.png				
Text					
Text Font and Color:	Camera Name 👖 🧿				
Text Background:	Non-transparent 🗸 📀				
Field of View					
Show Field of View					
Fill Field of View:	Hatch - Cross diagonal 🗸				
Field View Color:					

Application can also show alarm alerts on map window – inside the display of video channel of the alarm video source. For this you need to configure "Show alert on Map" features for corresponding alarm from "Alarm management" (discussed earlier)

### Map PTZ and presets



For better perspective, map window can also be panned, tilted, or zoomed with "Digital PTZ" tab available on left middle portion of the window.

User can arrange map window screen with PTZ movements and can also save this at preset section. 10 presets are supported, which user can configure and set.

The list of user configured presets is shown at "Map preset list" section (bottom-left portion of the window). For directly switching to any preset, user needs to select desired preset from the list. Selected preset's snapshot is shown at right hand side of preset list.

Use **K** button to delete selected preset from the list.

#### **Quick Access Link**

For better and fast access to map location's 'Quick access link' can also be defined on map.

To define 'Quick access link' right click on and select 'Set quick access link...' menu.

This will popup 'Add Quick Access Link' dialog. Provide link name, select map image on which you want to define quick access link, select preset name from list to which you want to set quick access link.



Quick access link can be displayed on map in two way icon

zone , select link mode as per your configuration.

Edit Quick Access Link					
Link Name:	IT Office Space Block C				
Image Name:	Default 🗸				
Preset Name:	01-ITOffcBlockC v				
Link Mode:	Zone 🗸				
Zone width:	5 % of map image dialgonal (5 to 100)				
Zone height:	5				
	20				

Following image displays quick access link 'IT Office Space Block C' on 'Default' map which accesses to preset '01-ITOffcBlockC' location in map.

To access '01-ITOffcBlockC' on map you need to double click quick access link 'IT Office Space Block C'.





### 3.4.2 Interactive maps - Google

Change map type to 'Interactive Map – Google', application will access internet connection to connect to Google maps.

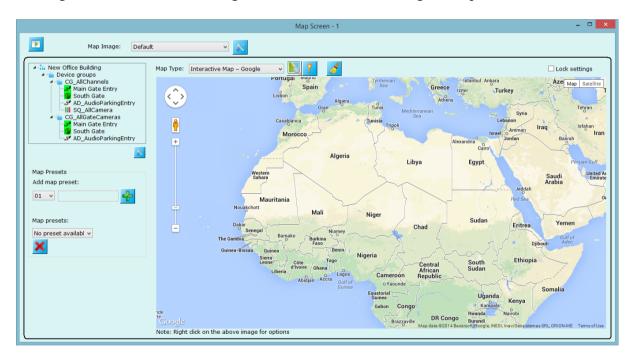
You can PTZ (pan, tilt or zoom) the map to go to required location.

For positioning cameras or sequences inside the map, please use right-click option on the required position and follow 'Set video channel location' or 'Set video sequence location' to place camera.

Separate 10 map presets can be configured for this type of maps.

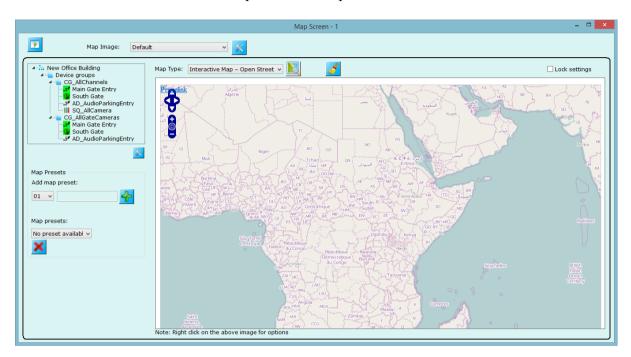
Select map preset from the 'Map preset list' and click *to* go to preset position.

For searching specific location, please click [1993] (Set map location button) to pop up a dialog box. Enter address or longitude and latitude details to go to required location.



### 3.4.3 Interactive maps – Open Street

Change map type to 'Interactive maps – Open Street', the application will access internet connection to connect to 'Open Street' maps.



Usage of this type is same as 'Interactive maps – Google' as discussed above.



### **3.4.4 Map Configuration**

Map screen allows to define multiple map configuration. To define new map

configuration click on 'Map Image Configuration' button. This will popup 'Map Image Configuration' dialog as shown in image below.

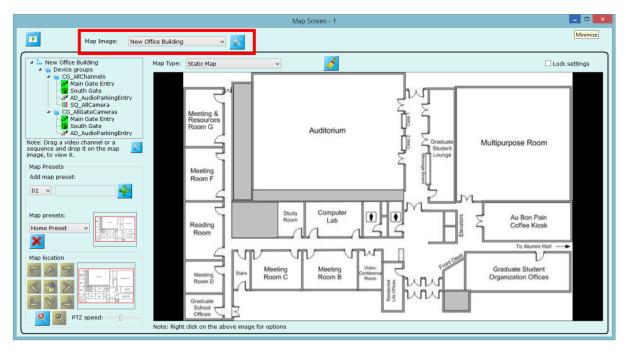
	Map Imag	ges Configu	ration	×
Map Images				
Name Default New Office Bui	lding		Default     Default_Copy	
Available Template	es at Server ding(Site_645A04A3DF1	3) 🗸		
Name			×	

Use **button** add new configuration to map screen.

Use button to change name of currentky selected map configuration from list.

Use **button** to create of selected map configuration.

Following image displays 'New Office Building' configuration added to map screen. You can switch between configurations isung list on top of the map screen.



Map templates can be created from map configuration which client can download and use them.

### **3.5 Analytics screen**

٢

Analytics screen shows real time object detection, tracking and also areas defined for analytics for different detections on live video streams of all video channels configured in the system.

Video channels for which video analytics is OFF, this screen shows live video feed that is/will be used for video analytics purpose.



Use page navigation and layout controls for easy accessing video windows.

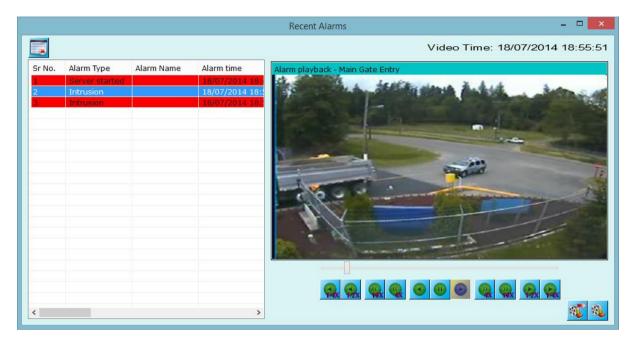


Hide user interface button - remove all the user interface controls and make video windows full screen. You can switch back to normal mode by right clicking on any video window to using menu "Show user controls" menu.

Toolbar buttons on each video window can be used for better controlling the video window.

### 3.6 Alarm screen

Alarm screen **lists all the alarms that application has learnt in this session**.



Click on any alarm from the list of alarms to start playback of clicked alarm on video right-hand-side window. You can use video navigation controls for better or easy time walk through.

Click on "Playback view" button to pop-up separate playback window which starts synchronized playback of all video channels that are configured in the system with the selected alarm's time. Please note – this is a separate playback screen (different from those which are available on main window toolbar).

Click on "Export video" button - this will pop-up export video dialog box with start and end playback timestamps set with respect to currently selected alarm. User can export alarm video in standard format or native format. Native format player is also copied in the same folder of the export video to playback native exported data in case "Native format" is used for exporting.

Click on "Clear alarm list" to delete all alarms from alarm list.

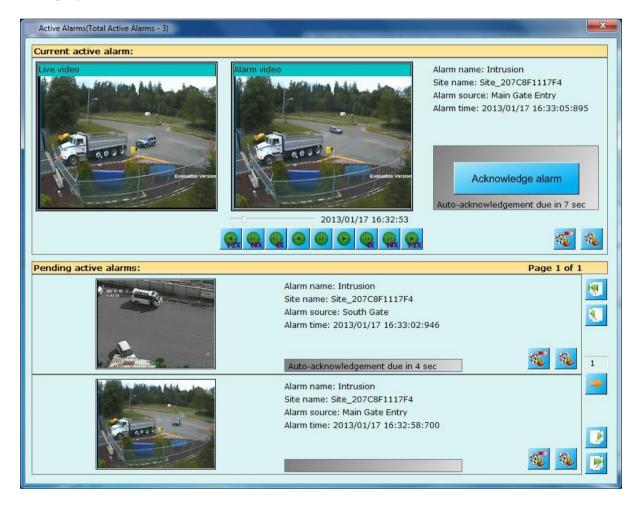
### 3.7 Active alarm screen

This screen shows all the active alarms that are currently present in the system. The window plays live video and alarm video for each active alarm in the list.

There are two sections in this window.

Current active alarm- for which system needs user's attention or input Pending active alarms – all pending alarms stacked in queue, waiting for user's attention or input after current active alarm is processed.

For every alarm item in the list, user can pop up separate playback screen and export video for particular alarm in standard or native format. Please note – there is only one extra playback screen for all active alarms in the list.



### 3.8 Alarm search screen

Search screen allows user to search the history alarms of the system. User can configure the time frame of the desired search, source of the alarm, type of the alarm, and alarm name (alarm name – can be a wide character string).



button to search alarms meeting configured criteria.

Click on any alarm from the list and search window show corresponding video of the alarm at right portion of the window. You can control the speed of video stream display with the navigation buttons.

	Alarm Search	- 🗆 🗙
Alarm search		
Start time:	7/18/2014 🖉	
End time:	7/18/2014 🖉 18:59:20 🖨	
Site:	Site_645A04A3DF13	
Alarm source:		
Alarm type:	All	
Alarm Name:	*	
Tag Name:		
Tag Value:		
	(Note: Use * for wild character searching.)	
Sr No. Alarm	m time Alarm type Alarm n	
	4/07/18 18:56:00 Intrusion	
	4/07/18 18:55:01 Intrusion 4/07/18 18:42:57 Server closed	
4 2014/	4/07/18 18:45:06 Server start	
<	alarm search result from list to view video	
Note: Select ala	alarm search result from list to view video	
🔲 🔕		

'Save search' saves the search results in standard format like XML or CSV or text file.

Use button present below in the list control to export all the alarms present inside the list.



'Export Video' will take you to 'Export Video' will take you to the export tab (see image at below page) and can save the video which can be played back with the standard media players like Windows media player or VLC.

'Playback View' button will popup separate playback video screen to show alarm video. Here in this screen (separate playback view), user can also add other video channels to playback.

### **3.9 User logs screen**



User activities in the current session can be seen from this window. This window has two tabs. 'Session logs' – which displays activities that happened from the application startup and 'Search' tab – where user can configure the search parameters and see the activities.

Each log includes user name, log time, action performed, its description and IP address of the machine from where the action is performed. So this way application lists all the activities that happened from local machine or remote machine.

### 3.9.1 Session logs

Current sess	ion logs:			
User Name	Log Time	Action	Description	IP Address
admin	26/12/2011 16:56:16	Alarm Search Performed	Alarm search performed for All channel for All alarm type	192.168.0.58
admin	26/12/2011 16:50:1	Map View Device Added	SQ_AllCameraSequence:192.168.0.58 added to map	192.168.0.58
admin	26/12/2011 16:49:53	Map View Device Added	VC_ExitGate: 192.168.0.58 added to map	192.168.0.58
admin	26/12/2011 16:49:35	Map View Device Added	VC_SouthGate: 192.168.0.58 added to map	192.168.0.58
admin	26/12/2011 16:49:24	Map View Device Added	VC_MainGateEntry:192.168.0.58 added to map	192.168.0.58
admin	26/12/2011 16:44:10	Logged In	user admin logged into system	192.168.0.58

'Save search' saves the session logs in standard format like XML or CSV or text file.

'Print' \_\_\_\_\_ – prints the session logs.



### 3.9.2 Search logs

User can anytime search for the activities that happened in some time frame or the activities performed by any user

sion logs Sea	irch				
Search Criteria:					
🔘 User Na	ame admin 👻				
Time	Start Time: 25-12-2	011 🔻 16:44:10 🔶			
	End Time: 26-12-2	011 - 16:44:10 🔶			
User Name	Log Time	Action	Description	IP Address	
admin	2011-12-26 16:44:09	Logged In	user admin logged into system	192.168.0.58	=
admin	2011-12-26 16:26:18	Recording Plan Changed	Recording settings changed for channel VC_Exit	192.168.0.58	
admin	2011-12-26 16:26:17	Channel Added	VC_ExitGate video channel added	192.168.0.58	
admin	2011-12-26 15:59:08	Channel Removed	VC_ExitGate video channel removed	192.168.0.58	
admin	2011-12-26 15:56:42	Channel Added	VC_ExitGate video channel added	192.168.0.58	
admin	2011-12-26 15:34:37	Logged In	user admin logged into system	192.168.0.58	
admin	2011-12-26 13:37:01	Privilege Updated	Updated details for privilege øü<	127.0.0.1	
admin	2011-12-26 13:36:51	Logged In	user admin logged into system	127.0.0.1	
admin	2011-12-26 13:36:21	New Privilege Added	privilege SecurityPersonnel added	127.0.0.1	
admin	2011-12-26 13:36:21	Privilege Updated	Updated details for privilege SecurityPersonnel	127.0.0.1	
admin	2011-12-26 13:35:50	Privilege Deleted	privilege new removed	127.0.0.1	
admin	2011-12-26 13:35:37	Logged In	user admin logged into system	127.0.0.1	
admin	2011-12-26 13:34:59	Logged In	user admin logged into system	127.0.0.1	
4				Lusin estimates and the	

'Save search' saves the searched logs in standard format like XML or CSV or text file.

'Print' \_\_\_\_\_ – prints the searched logs.

### 3.10 Search video bookmark screen



Video bookmarked added from video screens can be searched using this screen.

Enter start time and end time for the search.

Select site from the available options.

Select bookmark source (video camera name on which bookmark is created)

Select 'Created by' - user who created video bookmark

Add bookmark comment for which search is to be initiated. Wild card character search is supported so that you can use \* to search.

Click on button to search bookmarks.

E.g. all bookmarks with comment starting from 'Vehicle' can be searching using 'Vehicle\*' as comment. The application will show all bookmarks within configured start and end time and other parameters whose comment has 'Vehicle' as first word. You can use \* to search all the comments.

					Video Bookmark Search
ideo boc	kmark	search	1		Video time: 18/07/2014
			1		Main Gate Entry
Start tim	ie:	7/18	/2014 🔲 🔻 18:0	1:37	Statements & Statements & Ard Sec.
End time	e:	7/18	/2014 🔲 🛛 19:0	2:37 😫	
Site:		Site 6	545A04A3DF13	~	
Bookmai	rk	All			
source:					
Created	by:	All		~	and the second sec
Commer	nt:	*			
		(Note: search	Use * for wild cha hing.)	racter	
Sr No.	Boo	Sit	Source channel	Comment	
1	18/	Sit	Main Gate Entry	Vehicle Entry	0,000
2	18/	Sit	Main Gate Entry	Vehicle Leave	THE S CONTRACT OF THE DESCRIPTION
					HV
					1 1 1
					A committee and the second of the
<	1.10.101			>	
Note: Se	lect vid	eo boo	kmark from list to v	iew video	
	5				

Click on any searched video bookmark from the list, corresponding video is played at right hand side control. You can do playback operation on this video. This video will be played in a loop until user pause it or select other video

> SmartVMS<sup>TM</sup> Security Management System Server – User Guide www.smart-vms.com



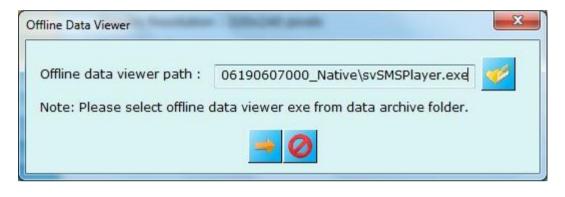
Use buttons for exporting currently playing bookmark video or to open playback screen to play bookmark video.

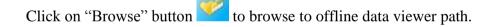
Use buttons to save the searched report to standard format like text, csv or xml and to print the report respectively.

### 3.11 Offline data viewer

Offline data viewer opens 'Native player' application to playback the offline data. This player is present at the path where user had asked application to store offline data (archive data) or export data (in case of video export in native format)

Please note – Offline data – the same data that user has archived from 'Data management -> Manual' or 'Scheduled' tab.





Click on 'Go' button **to** start playback.

Click on 'Cancel' button *states* to close this window.



### 3.12 Video panorama screen

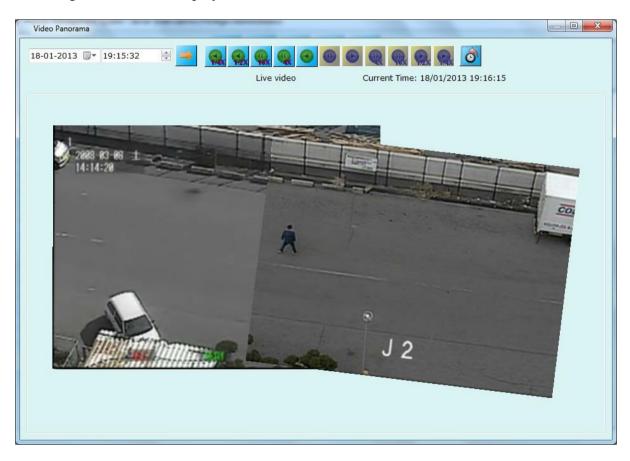
Once you have configured adding cameras to video panorama configuration and stitching them (*please refer Video panorama section on how to add cameras and stitch them for video panorama configuration*), this screen should be used to play panorama on **live feeds as well as playback feeds.** 

Use playback control navigation buttons to manage playback speeds. Start playback

from specified time by configuring start time and clicking *button*.

Use Use button to switch to instant replay mode so that screen will display video panorama for instant replayed videos.

Use button (*not shown in the screen as screen is playing live video*) for switching to live feed from playback feed.





### 3.13 Export screen



One or more cameras video exports can be initiated using this screen.

Configure start time and end time.

Channels can be selected from 'All channels' list and added to 'Channels to export'

list using button. Channels from 'Channels to export' can be removed using button.

Select video export format – it can be one of WMV-High Quality, WMV- Standard quality, or native export.

Enable watermarking if needed. If enabled, configure color to be used for watermarking video, text to be used, channel name and timestamp watermarking on/off.

			Export Video	
Start time:	7/18/2014	■▼ 19:00:23	Main Gate Entry	South Gate
End time:	7/18/2014		Section Addition and Addition	3%
Site name:	New Office B	uilding		
All channels:				
Site Name		Video channel		
		24		
Channels to e	export:			J 2
Site Name New Office B	uildin a	Video channel Main Gate Entry	March 1997	and the second s
New Office E		South Gate		
Format:	WMV-High Q	uality		
Export Path:		Files\Infinova\Secur		
File Name:	Use Default			
Enable wat		1		
🗌 Text		Ť		
Vertica	al spacing:	20 pixels		
Chann	el name		Cooble video digelav	
🗌 Video	timestamp		Enable video display	
	S.	×		
			Status: Processing	

Click on button to start exporting selected channels.

'WMV-High Quality' – saves video at high quality. Size of the output file is larger. SmartVMS™ Security Management System Server – User Guide

www.smart-vms.com

'WMV-Standard Quality' – saves video at standard quality. Size of the output file is smaller.

'Native format' exports video in custom format which is used by the application for recording. A separate video player will be made available at the same path of the exported data to playback this native format video.

User defined text along with channel name and video timestamp can be embedded on exported video, enable 'Enable Watermarking' setting to embed text on exported video.

# 3.14 Object Counting Reports



Click on

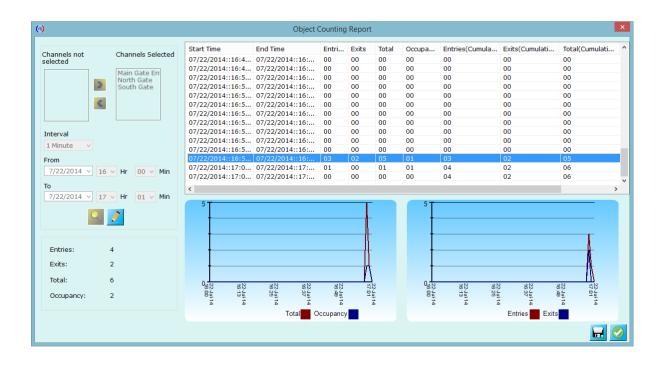
Object counting is one of the several video analytics features available in Security Management System's built-in video analytics module.

Object counting feature works as a real time people traffic measurement and analysis system for business intelligence solutions. It provides precise data on people entry and exit activities that allows users to make strategic decisions necessary to improve business performance.

This screen provides search ability for object counting logs.

User can select desired channels to be search, interval to be searched.

button to search object counting reports meeting configured criteria.



### 3.15 Video Search



'Security Management System' provides ability to analyze recorded data over the period of time for all video cameras configured in system also you can view playback for selected camera and export video data.

Security Management System Video Search – 🗆 🗙							
1       Main Gate Entry       Vear: 2014         2       Jul       Year: 2014         Sun Mon Tue Wed Thu       Fri Sat         1       2       3       4         6       7       8       9       10       11       12         13       14       15       16       17       18       19         20       21       22       23       24       25       26         27       28       29       30       31         -       Data available       Partial data available       No data available							
324 hour video timeline         \$200 at az as as         \$200 at az as	00:07:00 00:04:00 00:05:00 00:06:00 00:07:00 00:08:00 00 meline view	22 23,00 .09:00					

#### **Camera Selection**

You can select camera from dropdown list for which you want to analyze the recording history

#### **Calendar View**

Calendar view provides entire month recording history for selected channel and selected month.

Calendar view indicate recording history in following indicators,

Select on 'Day' in calendar to view details of selected day in 24 hour timeline.

Green status of day in calendar view indicates video recording is available for entire day.

Red status of day in calendar view indicates video recording is not available for entire day.

Use 'Next Month' and 'Previous Month' months to navigate to next and previous months.

### 24 Hour Timeline view

24 hour timeline view displays video recording data for selected day from calendar view.

'Video timeline focus' display minute details up to 10 and 30 minutes.

Click on timeline to view recorded data for selected time.

### **Video Playback View**

You can view and export recorded data from playback view.

# 3.16 License Information



Shows license information of this application, contains license holder name, shows number of channels supported in this license, and allow you to update new license.

# 3.17 Help

• Help button popups this file.

# 3.18 About



- About box displays the product information.

# 3.19 Lock Server





Lock server – closes all windows except main screen window and locks the system. To access the system again, you need to unlock it using the password of logged in account.



### End of the document.