

# SimView

Install and Setup

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# I Introduction

The directions for use include comprehensive step-by-step instructions and illustrations for using SimView.

All supplied user manuals and labeling from original manufactures should be followed. The SimView direction for use does not supersede those from the original manufacturer.

## I.I Before you start installing

- 1. Have all actions from the "Presales Questionnaire and site survey" been solved successfully?
- 2. Is the Network infrastructure ready with the camera(s) connected?
- 3. Unpack the boxes and check that everything is delivered and undamaged, so that you have all the needed parts ready before start.
- 4. Read the documentation before you start.





## I.2 Quick installation overview

The following is a quick overview of the steps needed to setup the SimView system.

They are only relevant if you are not having a Laerdal Representative to assist you with the installation.

- 1. If you ordered the cameras together with the SimView, the first thing to do is to install the cameras in the placed planned places and connect them to the Ethernet, if you already have the cameras in place then go to step 2.
- 2. Install the PC and connect it to the Ethernet.
- 3. Connect keyboard and mouse to the PC.
- 4. Connect Web-cam if needed to a USB port on the PC.
- 5. Connect the microphone to the PC.

# 2 Cautions and warnings

- By using this product, Laerdal® Medical does not condone the use of this system for violating any government, state or local laws or personal rights.
- This product contains software that may be installed to other computer systems that may allow remote visual and audio monitoring. Allowing access to private networks and the recording of unannounced conversations may be a violation of personal rights. It is recommended that individuals in the areas of recording equipment be made aware of the installed equipment and to the fact that there conversations and activities could be viewed and recorded without notice.
- It is not advised to use this system as a means of physical security for the protection of public or private property.
- Some regions have laws or regulations stating that rooms under video/audio surveillance must be properly marked with a sign or similar. Please make sure you are complying with your local regulations.
- Laerdal® Medical will not be responsible for loss or stolen property due to the use nor failure of operation of this equipment.
- Read understand, and follow all equipment instructions, safety warning and guidelines before operating the Laerdal® SimView and all associated equipment.
- Do not use cables or connectors with bent pins or visible damage.

## 2.1 Warranty

Please refer to the enclosed printed Laerdal® Global Warranty or <u>www.laerdal.com</u> for terms and conditions.

## 3 Important Note

## 3.1 SimView Security and Privacy concerns

This document is meant to address concerns regarding SimView privacy and security. These matters are of course very dear to Laerdal.

## 3.2 Whose responsibility is it to secure the SimView Server?

The SimView server system is by default not configured with any firewall or antivirus software. It is the customer's responsibility to install such software and to include the PC in the normal Domain policies on the network. Furthermore it is also the customer's responsibility to keep the PC's updated with the latest security patches.

This is due to the fact that once the PC is installed at the customer site; Laerdal has no control over the PC and therefore cannot be responsible for maintaining security.

## 3.3 Anti-virus and Firewalls

The PC is not supplied with an anti-virus program. *Windows* firewall is not activated by default. It is the customer's responsibility to protect the simulation system components from unauthorized access.

## 3.4 Privacy

Content stored on the SimView server cannot be accessed without proper login credentials. Two types of login exist to get access to the stored recordings. One type grants access to change the configuration, delete files and edit logs and the other type only grants access to view the recordings and live video feed without

being able to change anything.

You can create as many users as needed on the system.

It is important to understand that there is no filtering done on the logins, which means that all content stored on the server can be viewed by everyone with a valid login.

If the built in user access functionality does not suffice, then further restrictions can be imposed on the PC by adding Domain policies controlled by the local IT administrators on the network, however this is the responsibility of the customer to set up as desired.

**Note!** Some regions have laws or regulations stating that rooms under video/audio surveillance must be properly marked with a sign or similar. Please make sure you are complying with your local regulations.

## 3.5 Unauthorized access to SimView content

The SimView server software is, as mentioned in the Privacy section above, designed to prevent access to the content if a user does not have a login; however it cannot be guaranteed that unauthorized access to content is not possible. SimView Server should consequently never be exposed directly to the Internet. Securing the PC with the proper Domain policies and restrictions is therefore needed and should be planned with customer's IT administrator if the PC is to be connected to the local network.

Proper polices for exporting and securely storing files should therefore be implemented and carried out if deemed necessary.

It is also possible to isolate the SimView server and connected peripherals such as cameras and Instructor Application PCs on a separate network in order to minimize risks.

If your site wishes to restrict access to SimView Server and access to make recordings there are some key points to adhere to:

- Users accessing the SimView server must use their own Windows/Domain account, as the browser will remember passwords to SimView.
- All instructors using the system to record from an Instructor PC should have their own SimView user account and Windows account and not share a single account on this PC.

These points may not be interesting to your site if access to the SimView Server is physically limited and you value ease of use higher than strict security.

## 3.6 Axis IP Cameras

The cameras supported by SimView can be accessed over the network and should be secured with passwords to prevent unauthorized access to the live streaming video. Laerdal has no control over this software and rely on the vendor and user to securely protect access.

## 3.7 File security and backup of data

The customer is responsible for file security and backup routines for all simulation session data. All use and storage of simulation session data should be in accordance with local rules, regulations or laws, and is the sole responsibility of the customer. See more on backup in sections 6.1.

## 4 System setup

The system consists of a number of IP-cameras, Ethernet, network switches and the server PC. All these parts need to be connected.

The network infrastructure needs to be in place before the setup of all other parts, and should be done prior to receiving SimView.

The PC running SimView must use Windows Server 2012 as the operating system.

Note! The Safe Mode in Internet Explorer must the disabled

## 4.1 PC setup

Wait to switch the power on until all parts have been connected.

- I. Connect the PC to mains power.
- 2. Connect the screen to the DVI connection on the back of the PC, using the supplied DVI cable.
- 3. Connect the screen to mains power.
- 4. Connect the keyboard to a USB port.
- 5. Connect the mouse to a USB port.

The PC comes configured with user accounts, the Administrator ("Valued Customer") account is initially setup without a password, this is the account you should use for the remainder of the setup.

Now you can switch the power on and log in as the "Valued Customer" and do all the setups described in this manual, edit the account to add a password for security reasons, so only the administrator of the PC can change the setup.

## 4.2 Computer name

To make it easier to access the SimView Server from other PC's on the network, you can give the server PC a name that is easy to remember. The PC name is setup in the windows control panel for System and Security, under System. Change the Computer name to suit your needs.



Figure 2 The System Control panel showing the Computer name.

## 4.3 Network

If you are using your own network components, this is what to do.

**Note!** If the network uses a proxy server it is important that it does not interfere with the network traffic to and from the SimView Server.

#### Important information!

If other computers, printers or other devices are connected to the same network, their IP numbers shall be outside the number scheme used for the Laerdal system, to avoid addressing conflict that will make the system unstable or not functional at all. IP addresses may have to be entered manually to ensure connection even after a power shut down.

## 4.4 IP Cameras

The IP-cameras must be mounted in such a way that they will give the best possible overview of the operating room, and give the possibility to cover the action from different angles.

If the cameras used are not PoE enabled, the camera supplied power supplies must be mounted close to the cameras.

The cameras must be setup with an administrator account name and a password in order to be accessed by SimView. This can be done with the AXIS supplied software, or by accessing the camera from a webbrowser if you know the IP address of the camera. The default administrator name is "root", and cannot be changed, but you must apply a password for the account.

Tip! You can use SimView to get the camera IP address, see chapter 5.2.6 for more information.

Note! SimView only supports AXIS IP cameras.

*Tip!* The quality settings of the video streaming influence on the amount of storage needed for recording, you may have to change the settings to balancing the video quality vs. hard disk storage during recording. Full HD recording will take up a large amount of hard disk space. You can change the video setting in the camera configuration.

#### 4.5 Network setup

There are two different approaches to the SimView network setup, either a local isolated network or as part of a bigger local area network (LAN) covering the whole site or campus.





The basic isolated network gives some benefits regarding security and can better manage the traffic load from IP cameras, as no other traffic is on the network. The drawbacks are no connection to SimStore and other parts of the network etc. The backup must also be managed within the isolated network.

The LAN connected network setup, poses some issues which must be dealt with before connecting the SimView system. The traffic generated by SimView has to "compete" with the other traffic on the LAN, which may give some problem if the bandwidth is not high enough.

The benefits of the LAN connected SimView are easy access to the recorded sessions from across the network, and the possibility to use backup services provided by the LAN servers.

## 4.5.1 Configure the Static IP Address

Membership in Administrators, or equivalent on the SimView server PC, is the minimum required to perform these procedures.

How to configure a static IP address on the SimView server (Windows Server 2012):

- I. Click Start, and then click Control Panel.
- 2. In Control Panel, click Network and Internet. Network and Internet opens.
- In **Network and Internet**, click **Network and Sharing Center. Network and Sharing Center** opens.
- 3. In Network and Sharing Center, click Change adapter settings. Network Connections opens.
- 4. In **Network Connections**, right-click the network connection that you want to configure, and then click **Properties**.
- In Local Area Connection Properties, in This connection uses the following items, select Internet Protocol Version 4 (TCP/IPv4), and then click Properties. The Internet Protocol Version 4 (TCP/IPv4) Properties dialog box opens.
- 6. In Internet Protocol Version 4 (TCP/IPv4) Properties, on the General tab, click Use the following IP address. In IP address, type the IP address that you want to use.
- 7. Press tab to place the cursor in **Subnet mask**. A default value for subnet mask is entered automatically. Either accept the default subnet mask, or type the subnet mask that you want to use.
- 8. In **Default gateway**, type the IP address of your default gateway.
- 9. In **Preferred DNS server**, type the IP address of your DNS server. If you plan to use the local computer as the preferred DNS server, type the IP address of the local computer.
- 10. In *Alternate DNS Server*, type the IP address of your alternate DNS server, if any. If you plan to use the local computer as an alternate DNS server, type the IP address of the local computer.
- 11. Click OK, and then click Close.

## 4.5.2 Ethernet switches

Ethernet switches may be necessary in order to connect everything to the SimView server. If the cameras are PoE enabled it will be an advantage to use network switches that will provide PoE power to the cameras, as this will make installation easier.

## 4.6 Microphone installation

- I. Plug the microphone jack into the audio input port.
- 2. Open Control Panel from the Start button
- 3. Select Sound
- 4. Select the **Recording** Tab,
- 5. Select the microphone you want to use and select **Properties**.
- 6. Under the *Listen* Tab you can adjust the recording level, set the level at press **OK**.
- 7. Now test if the level is adequate, by looking at the bar level in the window while speaking.

You will be able to add other audio sources via the SimView setup page as well, not only the Windows default, if you want to change set-up.

## 4.7 External Audio Equipment

If you are using external mixers for multiple microphones etc. the installation is very similar to the simple one microphone setup. The external audio equipment is connected either to the microphone input or the line input, and then you must use the control panel to select to input you plugged the equipment into. When using external audio equipment, only one channel may be in use, you will have to select the right one when setting up the audio. In the audio setup you can clone from right or left channel to suit your setup, the cloned channel will be copied to both channels for recording and playback.

## 4.8 USB Web-cam install

**Note!** SimView will work with Microsoft USB cameras, functionality with other brands of USB cameras is not guaranteed.

- I. Plug it into a free USB port.
- 2. Install the supplied software and configure it according to the supplied user guide. *This may not be needed for all models!*
- 3. If the web-cam includes a microphone, you will have the possibility to use it instead of any other installed microphone, use the "*Audio setup*" to select the one you want to use, see chapter 5.2.8.

## 4.9 Analog Cameras

If SimView Server PC is equipped with the Laerdal video grabber card, then SimView also supports the use of analog video cameras. How to add the analog video cameras see chapter 5.2.10.

When upgrading from the Advanced Video System, it is not necessary to change the physical camera setup, you can continue to use the existing analog cameras.

## 5 SimView

## 5.1 Software installation

The SimView server PC will be supplied with the software pre-installed. First time you want to access SimView, you can do so by following these steps:

Log in to the "Administrator" account.

On the desktop you will see the SimView application icon. To start the SimView double click the SimView icon on the desktop:



## 5.2 Configuration of SimView Server

In order to use SimView it will have to be configured with the addition of extra users and different external component like microphones, cameras, Patient Monitors etc. this is done in the "View & Setup" window.

## 5.2.1 Users

In order to use SimView Server, users have to be added.

A default administrator user is already created with the following login information:

User: admin Password: Laerdal1

**NB:** You should change the password for this user once you are ready to use the system! **Note!** If no SMTP server address is setup it will not be possible to reset a lost password for any account in SimView. Se the chapter "Server settings" for more info on how to setup the SMTP address.

To add more users you must login as administrator.

- I. Click the VIEW &SETUP button (1).
- 2. Click the Server settings (2) triangle to open the dialog.
- 3. Click the User administration (3 on Figure 5) this will open an input window where all details about the user can be entered.
- 4. Fill in all the fields (1 on Figure 6)
- 5. Click the User type radio button (2) to give the user a role.
- 6. Click the Create button (3)
- 7. Close the input window by clicking the VIEW &SETUP button ((1) on Figure 4)

SimView.			VIEW & SET	ир 🏫 номе
	admin   Logout		Laerdal May un ha	e Health Stream
	00:00			
Equipment configuration				Add equipment
▷ Server settings <2				
		© 2013 SimVentures. All rights reserved. Version V About		

Figure 4

Making Simulation Easier	admin   Log off	Laerdal Generation Control Con
Server settings	Disk Usage	System notifications
Server name SimServer Working directory D:\AVSFiles	Available disk space 56 % 105 GB free of 239 GB Automatic clean up options	No notifications.
SMTP server nosr al User administration SimView system error	Delete data that is older than [90] days     Run automatic clean up now.     View recovered simulations	Save changes



User name		
Nurse Karen		
Email address		
k@l.dk		
Password	Minimum 6 characters	
Confirm passwo	ord	
User type:	∾<2	

Figure 6 The user creation window

The difference between the Administrator and the User is in what they can do with the system. The administrator can record, change the configuration of the system regarding number of cameras etc. and edit the log in the simulations, by adding comments; the normal users can only watch simulations.

## 5.2.2 Server settings - General

Under server setting the address of a SMTP mail server can be added in order to get a mail with a password reset, in the event that someone has forgotten the password it. If the address is not present only Laerdal support will be able to help. Add the address in the filed SMTP server, and press **"Save changes"** In the server setting pane you can also add a server name and the directory for saving the simulations, if nothing is entered for the **"Working directory"** the default C: \Avsfiles will be used.

#### 5.2.3 Server settings - Storage

Since SimView Server handles video files in high quality, the system will run out of space eventually and it is important to actively decide on whether older simulations should be backed up or simply deleted.

A backup strategy must therefore be made on how to store old simulations and prevent data loss in the event of a hard disk failure.

The data storage strategy can be set in the server settings frame. See Figure 5.

Simulations can be exported to external disk storage by using the export function. When exported they are also ready for use with the SimViewer application.

The need for space depend on how the video quality is setup, the use of full HD video takes up much more space than normal VGA video, but the quality of the video may be sufficient, for many purposes.

The server settings only offer the possibility to delete by date. If this is not what you want you will have to manually export or delete files. To do this go to the home screen:



Figure 7 The Home screen and options for simulations

Select the recording to watch or delete by clicking on the link below the picture.

When you have selected the simulation by clicking on the picture you have 3 options if you click the triangle in the bottom right corner:

- Export the simulation for stand-a-lone use with SimViewer or for backup purposes.
- Delete the simulation if it is not relevant anymore and for freeing up space on the hard drive.
- You can make a private link for sharing the simulation with others without exporting it. You can then send this link to the person you want to share it with. The person will only be able to see this simulation and nothing else, and will not be able to user other features of SimView The person that gets the link must have access to the PC with SimView, but does not need a SimView account to see the simulation. The access via this link will be restricted to only this one simulation.

**Note!** Only delete simulation files using the SimView **"Home"** screen or by using the facility under Server settings: **"View recovered simulations"**.

## 5.2.4 Video file sizes

The hard disk storage needed for video files depends on the resolution and frame rate.

#### AXIS camera file sizes

1280x720 25fps 30MB/min	800x450 25fps		480x270 25fps	
1280x720 20fps 25MB/min	800x450 20fps	I2MB/min	480x270 20fps	6MB/mim
1280x720 15fps 20MB/min	800x450   5fps	I 0MB/min	480x270 15fps	5MB/min
<b>USB camera file sizes:</b> 1280x720 10fps 15MB/min Analog camera file size: 15MB/min,	640x480 30fps there is no size op		320x240 30fps ike 640x480.	5MB/min

The sizes are approximate as the motion activity in the picture will change the actual file size; the more motion the bigger file size

#### 5.2.5 Unsaved simulations

If you by mistake forget to save the simulations during debrief, you can find the simulation in the "Server setting" under "View recovered simulations".

When clicking this link you will see a window with the simulations that for any reason not are saved correctly, you will be able to view them and decide if they have to be deleted, or you can delete straight away without viewing first.

#### 5.2.6 IP Camera

To add cameras to the simulation setup, start SimView and login as Administrator. **Note!** SimView only supports AXIS IP cameras.

- I. From the Home screen click the "VIEW & SETUP" (I)
- 2. Click the "Add equipment" (2)
- 3. Click the in the "Devices" (3) box.
- 4. Select the camera type you want IP or USB to use by clicking on it in the list window (4 and 5).
- 5. Wait while the list of IP cameras is updated (see Figure 11).
- 6. Click in the "Found devices" (6) to get the drop-down list and select the desired camera (7).
- 7. Fill in the "Login" (8) administrator name and "Password" (9)
- 8. Click the "Add equipment" (10).
- 9. You can now select the resolution on the video quality by clicking the "**Resolution**" (11) drop-down list and selecting the resolution you want.
- You can also change the number of picture per second (fps) by clicking the "Fps" (12)drop-down list
- 11. Press "Save changes" (13) if this was the last camera to add, otherwise add a new camera by clicking the "Add equipment" button (2) again and continue until you have added all the needed cameras.
- 12. You can deactivate the camera by un-checking the "Active" (14) check box, and click "Save changes".
- 13. If you want to remove the camera from the setup click on the "Remove" button (15).

Making Simulation Easier	admin   Log off	Laerdar 🚱 HealthStream
∇ Equipment configuration		Add equipment
	Devices	
	Select device to add	
		Add equipment

Figure 8 Add equipment starting point

	Add equipment
Devices Select devices to add IP Camera Uds Camera Haliont Honitor Analog Camera	
	Add equipment

#### Figure 9 Drop-down list of possible type of equipment

Equipment configuration	De Select what type of device you want to add Select device to add IP Camera Udo Camera Microphone Patient Monitor Analog Camera	Add equipment
		Add equipment

Figure 10 IP Camera selected

♥ Equipment configuration		dd equipment
Divices IF Camera V	P address Login Password	d equipment

Figure 11 IP camera search on going please wait



Figure 12 IP camera search finished and drop-down list ready



Figure 13 IP camera selection with camera IP addresses shown

Equipment configuration     AXIS P5534		Set resolution for thi	is device	Add equipment
✓ Active	Name AXIS P5534	High 1280x720 High 800x450 Medium 480x270 Low 320x180	11 5 pr. Second	Model name AXIS P5534
	Type IP Camera	IP address 192.168.119.84	Login root	Password •  Second Save changes

Figure 14 Video resolution selection



Figure 15 Frames per second selection

## 5.2.7 USB Cameras

Adding USB cameras is similar to adding IP cameras.



Figure 16 Add equipment starting point

	Add equipment
Devices Select device to add IP Camera Usb Camera Microphone Patient Monitor Analog Camera	
Γ	Add equipment



✓ Equipment configuration	Add equipment
Color a ded base of decire you want to add P Camera Usb Camera Usb Camera Microphone Patient Monitor Analog Camera	
	Add equipment







Logitech HD Webcam C510		Number of pictures show	n each second	Add equipment
Active	Name	High 1280x720 30 fps Hedium 640x480 30 fps Low 320x240 30 fps	Type WebCam	Model name Logitech HD Webcam C510
				Re 9 Save changes



## 5.2.8 Audio

To add a microphone to the simulation setup, start SimView and login as Administrator.

To add the Windows default microphone or audio input that has been set-up under the recording tab in the "Windows Sound Control Pane":

- 1. From the Home screen click the "VIEW & SETUP" (I)
- 2. Click the **Add equipment** link (2).
- 3. Select the Microphone by selecting it from the drop down menu (3 and 4)
- 4. Select the microphone you want to use from the drop down list (5 and 6).
- 5. Click the Add equipment (7) button to update and exit.
- 6. Choose the stereo mode to suit your setup, if you are using the line or microphone input (8).

SimView Making Simulation Easier			
	admin   Log off	Laerdal 🌚 H	fealthStrea
ipment configuration			
			guipme
	Select device to add		



	Add equipment
Devices	
Select device to add TP Camera Ueb Camera Vicrophone	
Pilicophone Patient Monitor Analog Camera	
	Add equipment

Figure 22

✓ Equipment configuration	
	Add equipment
Devicec	
Se Select what type of device you want to add	
Usb Camera Microphone	
Patient Monitor	
Analog Camera	
ه	dd equipment

Figure 23







Figure 25

## 5.2.9 Patient Monitor

To add the Patient Monitor, start SimView and login as Administrator.

- I. From the Home screen click the "VIEW & SETUP" (I)
- 2. Click the "Add equipment" (2) button.
- 3. Click the in the "Devices" (3).
- 4. Select the Patient Monitor by clicking in the list window (4 and 5).
- 5. Insert the correct IP number in the "IP address" (6) field, the other fields are pre-filled and should not be changed.
- 6. Click the "Add equipment" (7).
- 7. If you want to change the IP address later enter the new address in the field (8)
- 8. Press "Save changes" (9).
- 9. Later changes in IP address can be done by changing the address in the address field (8) and save changes.

			J <b>P. 🏫</b> НОМЕ
Making Simulation Easier	admin   Log off		HealthStream
Equipment configuration			
		2	Add equipment
	Select device to add		
		4	Add equipment



▽ Equipment configuration		Add equipment
	Devices Felder device to add IP Camera Usb Camera Microphone Patient Monitor Analog Camera	
		Add equipment

Figure 27

Equipment configuration	Devices Select devices add IP Camera Usb Camera Microphone Patient Monitor Analog Camera	Add souipment
		Add equipment

Figure 28





▽ Equipment configuration				
Patient Monitor				Add equipment
✓ Active			The IP Address of this device	e
	Name Patient Monitor	Model name Patient Monitor	8 192.168.119.43 [ ×	Port 5001
				Ref 9 Save changes



"*Tip*" Remember that the Patient Monitor is regarded as one of the maximum 4 cameras that can be used during recording. In order to enable Patient Monitor recording you must setup the SimView Extension service and enable it in the Instructor Application, see chapter 5.3.

## 5.2.10 Analog camera

Adding an analog camera follows the same line as the USB camera, but requires that the PC is equipped with a Laerdal video grabber card. If you have more than one camera select the with the drop down list (6).





▽ Equipment configuration		Add equipment
	Devices Select device to add IP Camera Wicrophone Patient Monitor Analog Camera	
		Add equipment

Figure 32





▽ Equipment configuration				Add equipment
	Devices Analog Camera 🗸	Found devices		
			7	Add equipment

Figure 34

## 5.3 SimView extension installation and configuration

If you are using SimView with Instructor Applications, like SimMan, SimMan3G etc. you must install the **SimView Extension Configuration tool on the PC running the Instructor Application** and configure it according to your needs and the guideline described in this guide.

This is also the steps you need to make if you have updated from AVS; the video settings in the Instructor Applications have to be changed in order to use SimView instead of AVS Video Server. If you should want to use AVS again, just change the video setting back to the old values and remove legacy support in SimView Extension, see Figure 35.

The IP address for the SimView Server may have to include /SimView, if that is the address you must write in a browsers navigation field to connect to the SimView Server, i.e. 192.168.1.125/SimView and not just 192.168.1.125.

You can also use the name you have entered as the Computer name in the Control panel instead of the IP address, see chapter 4.2.

Use the "Test connection" button to make sure you have the correct server address, then press "Save and close".

**Note!** SimView Extension must be installed after all other Laerdal software like the simulators SimMan3G, SimMan etc. and the Laerdal Debrief Viewer.

🐑 SimView Extension Configuration 📃 📼 🗙	SimView Extension Configuration	= 🗆 X	SimView Extension Configuration	- • ×
Connection Installation	Connection Installation		Connection Installation	
Sim/Yew Server Address	Product	Status	Product	Status
192.16. SimView	AsIA	Product Not Installed	AstA	Product Not Installed
Test connection	SimMan	No Legacy Support	SimMan	Legacy supported
	Click to use with SimView	No Legacy Support	SmBaby ( Click to use with AVS	) Legacy supported
	SimJunior	Product Not Installed	SimJunior	Product Not Installed
Insert your SimView Servers IP	SimMom	No Legacy Support	SimMom	Legacy supported
address here	SimNewB	Product Not Installed	SimNewB	Product Not Installed
	SimMan3G	Service installed	SimMan3G	Service installed
	1			
Save and close	Install Legacy Support Remov	e Legacy Support	Install Legacy Support Remov	ve Legacy Support

Figure 35 The SimView Extension setup windows

## 5.4 Simulator setups for use with SimView.

5.4.1 Setting up SimMan3G and SimMan Essential SimMan3G and SimMan Essential use the same setup. The next two pictures show how to setup the service.



Figure 36 SimMan3G Extension Service, select the Profile Editor

Help								
	General	Sounds	Bleeding and fluids Patient monitor	Drugs available	Guidelines			
		General	V TECH					
		⊟ → Video Re				He	eset this page to d	erauit
		□ → Record						
			e no recording					
			e web camera					
			Quality: Medium Connected to: Instructor client					
			Audio source: Default					
			e video server (AVS)					
			Video server IP address: 192.168,119.65	1				
			Camera 1					
		Ĥ	Camera 2					
			Camera 3 (The PC running the Instru	ictor Application)				
			Camera 4					
		□ → Patier	at monitor recording					
			able monitor recording					
			Quality: High					
			Monitor source identification for Vide	eo client				
			Monitor name: monClientName					
			- Port: 5001					
		- Maxim	num recording time (minutes): 120					
		- → Units	and the second states of the second states of the					
		Use SI	units					
		- Capno	ometer unit: mmHg					
		- ICP un	nit: mmHg					
		- Temp	erature: F					
		Lactat	e unit: mM					
		Weigh	it unit: kg					
			ate auscultation focus					
			er event list alphabetically (classic mode					
			rce: Any available (CO2 primary, ECG sec	ondary)				
			or setup: Remember last setting					
			of log post & comment markers: Relative					
		- Period of	inactivity before manikin goes into sleep	mode (minutes): 2	0			

Figure 37 The Profile editor setup for the SimMan3G

- Enable "Use video server (AVS)
- Insert the IP address, ("localhost" or "127.0.0.1" is not allowed) for the PC running the Instructor Application.
- Enable monitor recording
- Set the quality to High, screen size on patient monitor not to exceed Full HD (1920x1080 pixels) Use the "Save as.." to save the profile and the press "Close"
- You must the start a new session in order to use the new profile.

*Tip!* When SimMan3G starts you can make sure that the profile you saved is the one that is used for the session:



Figure 38 The SimMan3G start screen showing the profile used

#### 5.4.2 Non SimMan3G setup

The setup for SimMan, SimMom, SimJunior Advanced, SimNewB Advanced for SimPad, ALS Advanced for SimPad, SimJunior for SimPad and SimBaby is different as seen on the next illustration

	Video Recording Configuration	1	8
Laerdal SimMan Software File View Simulation Edit Edit Monitor Setup Start Scenario Editor Start Handler Editor Start Trend Editor Configuration Wicrophone Configuration Video Recording Configuration Set Vital Signs Korotkoff Controls	Recording camera Use no camera Use web camera Use video server Web camera recording Uservideo server name: Video server name: Camera 1 Camera 2 Camera 3 Camera 4 Patient monitor recording Use to the monitor recording Quality:	Medium localhost	or Application
	Recording time Maximum recording time: Monitor source identification fr Monitor name:	30 or Video Client dtime#15	(minutes)
	Port	5001	Cancel

Figure 39 The SimMan setup

**Tip!** If you experience connection problems between the Instructor Application and SimView, after the setup, make sure that the Laerdal SimView Extension Service is started, and configured properly. you can check by using the "Component Services" tool, go to the Start menu and write services in the search field; select the "Component Service". Under the "Services (Local)" you should see "Laerdal SimView Extension Service", if the status is not running, then press the "Start" button in the top left side of the services listing. You can also use the SimView Extension to check the connection and the service as both will be checked when the **"Test connection"** is used.

## 6 Maintenance

## 6.1 Backup strategy

Video files takes up large amount of hard disk storage, so a strategy for how to save the simulations for later use is needed.

The main use of SimView is to record the session and do the annotations for the students, but not to keep all the simulation on the server.

The simulations that need to be saved for later and frequent us must be exported with the export function to a remote storage server or a portable hard disk.

From the remote storage server all the simulations can be viewed with the SimViewer application from any PC connected to the storage server or using the portable hard disk.

You can export simulations in a format ready for the SimViewer application for viewing anywhere including offline as the files can be saved on USB memory sticks or portable hard disks.

You can also delete files not needed after being backed up somewhere else.

## 6.2 Hard disk "clean-up" of unsaved simulations

If you have unsaved simulation you can delete or save them using the "Unsaved simulations" under the "Server settings" tab. An unsaved simulations occurs whenever you don't press the save button during the debrief session that is opened after session is ended. This saving of the files is to make sure you don't lose any simulations by mistake. When you press the "Show" button you will get the option to save the simulation. You can also just delete the simulation if you don't need it.

Note! Any unsaved simulation is automatically deleted after 12 hours.

An automatic clean-up is run every 12 hours, but you can run the clean-up manually at any time.

	Message from webpage	×
	Please note that this will run automatically and delete al meeting the criteria, except recordings marked as favori	
	ОК	Cancel
✓ Server settings           General	Disk Usage	System notifications
Server name	Available disk space	No notifications.
SimServer Working directory	105 GB free of 239 GB	
D:\AVSFiles		
SMTP server nosr al User administration	Automatic clean up options Delete data that is older than 90 days Run automatic clean up now View recovered simulations	
SimView system error log		2 Save changes



The automatic clean-up for saved simulation is enabled on the server settings by entering the number of days that simulation have to be older than in order to be deleted (1), and then click in the check to enable the feature box and save changes (2), you will get at warning to alert you about the automatic deletion of files. (See Figure 40)

Note! Sessions marked as favorites will not be deleted

## 6.3 System notification

admin   Logout	! System notifications	Laerdal'	HealthStream*

Figure 41

If you get this message you will have to click it and under server setting you will see what caused the warning.

Note! Only the admin user is able to see the information in the Server settings

General	Disk Usage	System notifications
Server name	Available disk space	! Running low on disk space
SimServer	71 %	Please, do a manual clean up.
Working directory	68 GB free of 239 GB	
D:\AVSFiles	Automatic clean up options	
SMTP server	✓ Delete data that is older than 90 days	
nosm	Run automatic clean up now	
User administration	View recovered simulations	
SimView system error log		
		Save change



Solve the issue indicated in the System notification area. This can be system driver upgrade or as shown here a hard disk clean-up.

## 6.3.1 What to backup?

Create a system image backup regularly as this will store all settings and programs for easy repair if the hard disk stops working

In order to repair or move the SimView simulations it is important to make regular backups of the following folders:

- AvsFiles and any extra working directories used for storing video
- App\_Data folder in the SimView installation folder, including the file avs.sdf.

The AvsFiles folder is either specified in the Server setting in View & Setup or placed at the default location: C:\AvsFiles.

The App\_Data folder with the file avs.sdf is located in <System Drive>:\Program Files (x86)\Laerdal\SimView Server\App\_Data.

# 7 Troubleshooting

Q: My events and timeline don't match / Timeline starts in wrong position

A: Make sure that all your Instructor PCs, Manikins and SimView Server time and date settings are in synch and in same Time Zone.

Q: I get an error when starting recording a session, that the server in busy, unavailable or network problem, but the server is not in use and I can connect to it with my browser?

A: make sure you have the latest version of the SimView Extension, and it is set correctly regarding IP addresses, it will check both the connection and that the service is up running. I severe cases you may have to reboot the Instructor Application PC.

Q: I cannot record on the SimView server even as the SimView Extension tests OK?

A: Check if the Laerdal SimView Extension Service is started; use the "Component Service" to check.

🍋 File Action View V 🗢 🔿 🔁 🔂 🗔	indow Help ➡ 🛛 🔽 💼 🕨 🗰 🔢 🕪					- 5
Console Root	Name	Description	Status	Startup Type	*	Actions
Component Services     Gerver Viewer (Local)     Gervices (Local)	🔍 IPsec Policy Agent	Internet Protoco	Started	Manual		Services (L
	KtmRm for Distributed Transaction C	Coordinates tran		Manual		More
	🕞 Laerdal Connection Service	Provides remote	Started	Automatic		
	🔍 Laerdal SimView Extension Service	Gives support fo	Started	Automatic		Laerdal Si
	🔍 Lenovo Auto Scroll		Started	Automatic		More
	🔍 Lenovo Doze Mode Service		Started	Manual	*	
				·	KI .	

Figure 43

You can find the "Component Service" by typing it into the Start menus search field.

Q: Something went wrong during recording and now I cannot see my simulations?

A: The simulation may not have been save in the debrief session after the recording was stopped. In the "Server setting" tap you can use the "Unsaved simulations" button to see simulations that have not been save by mistake, you can view the simulation and then save it or if you want delete it.

Q: I can see my simulations on the SimView Server PC, but the video is frozen on my Instructor PC? A: If the number of video cameras incl. the patient monitor is more than 2 some older laptops cannot play the video. To solve the problem either reduce the number of cameras or upgrade the Instructor laptop PC to the recommended hardware.

Q: Windows was upgraded, by the windows auto-upgrade, now my USB cameras don't work? A: The USB camera driver has been upgraded and you must remove the camera in SimView and the setup the USB camera in SimView again.

Q: A USB device will not start. It used to work.

A: Please remove it from the device list and add it again. If it still doesn't work, try to move it to a different port.

Q: My USB camera is having issues working properly even after trying to move it to a new port and reconfiguring it.

A: Make sure the newest drivers are installed.

Q: Why is the Instructor app referring to AVS system instead of SimView

A: This was the name of the Laerdal AVS software for which the Instructor Applications were originally created.

Q: I can't start a recording in the SimView browser, even though I have stopped and went to debrief in the Instructor application.

A: In SimView browser click reload or press F5, then you can start a recording from the SimView browser.

Q: The video feed is pixelated or bad. It usually looks ok.

A: The IP cameras will need to be rebooted once in a while after heavy use or many concurrent users. You can do this by unplugging them from cable or by logging on to Operator mode and going to reset camera.

Q: Why is there a 2 second delay in the video and sound when viewing through SimView?

A: The system aggregates the different audio and video sources and then relays them to any client logged on to SimView Server. This makes it easy to view the all the feeds remotely, with as little effort as possible for the end user, but unfortunately the aggregation and relay add a delay.

Q: How much space does my video recording take up on the hard disk? A: Have a look in chapter 5.2.4 on page 13.

Q: How do I reset the AXIS camera to its factory defaults?

A: To reset the camera to the original factory default settings, use the control button and the restart button on the side of the camera as described below:

#### AXIS P5534:

Using the control and restart buttons will reset all the parameters, including the IP address, to the factory default settings:

I. Remove the top cover.

2. Press and hold the control button and the restart button at the same time.

3. Release the restart button but continue to hold down the control button.

4. Continue to hold down the control button until the status indicator color changes to amber (this may take up to 15 seconds).

5. Release the control button.

6. When the status indicator changes to green (which may take up to 1 minute), the process is complete and the camera has been reset. The unit now has the default IP address 192.168.0.90

7. Put the top cover back in its original position.

It is also possible to reset parameters to the original factory default settings via the web interface. For more information, please see the online help or the User's Manual available from the AXIS Network Video Product CD supplied with this product.



#### AXIS M3204:

This will reset all parameters, including the IP address, to the Factory Default settings:

- I. Disconnect power from the camera.
- 2. Press and hold the Control button and reconnect power.

3. Keep the Control button pressed until the Power indicator flashes amber (this may take up to 15 seconds).

4. Release the Control button. When the Power indicator displays green (which can take up to 1 minute) the process is complete and the camera has been reset.

It is also possible to reset parameters to the original factory default settings via the web interface.

For more information, please see the online help or the user's manual.



Q: I can see a lot of simulations on the "Home" screen, but I cannot view them?

A: The simulation file may have been moved or deleted without the use of SimView. If the files are moved back, they should play again, if they have been deleted, delete the entries on the "Home" screen, they have been lost.

# 8 Index

A list of acronyms used in the document and also links to where to find things.

PoE WiFi	Power over Ethernet Wireless internet
WLAN	Wireless Local Area Network
IP-Camera	Internet Protocol Camera
Ethernet	Network type
Switch	Network switch
Firewall	System to block unwanted access
LAN	Local Area Network
HTTP	Hyper Text Transfer Protocol
RTP	
RTSP	
DNS	Domain Name Server
H.264	
MJPEG	Motion JPEG
JPEG	Joint Photographic Experts Group
VBR	Variable Bit Rate
CBR	Constant Bit Rate