ernitec

Onsite solutions to hardware and software problems

Applies for Ernitec ESR servers

Caution and Preventive Tips

Important Information

Before proceeding, please read and observe all instructions and warnings in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service. When unpacking your unit, check for missing or damaged items. If any item is missing, or if damage is evident, DO NOT INSTALL OR OPERATE THIS PRODUCT. Contact your dealer for assistance.

- Handle with care, do not drop the unit
- Mount the unit in an equipment rack or place it on a solid, stable surface
- Indoor use only. Do not place the unit in a humid, dusty, oily, or smoky site
- Do not place it in an area with poor ventilation or in an area close to fire or other sources of heat. Doing so may damage the unit as well as cause fire or an electric shock
- When cleaning is necessary, shut down the system and unplug the unit from the outlet before uncovering the top cover. Do not use liquid cleaners or aerosol cleaners. Use only a damp cloth for cleaning
- Always shut down the system prior connecting or disconnecting accessories, with the exception of USB devices

Rack Mounting

Consult with the supplier or manufacturer of your equipment rack for the proper hardware and procedure of mounting this product in a safe fashion. Avoid uneven loading or mechanical instability when rack-mounting units. Make sure that units are installed to get enough airflow for safe operation. The maximum temperature for rack-mounted units is 40 °C. Check product label for power supply requirements to assure that no overloading of supply circuits or over current protection occurs. Mains grounding must be reliable and uncompromised by any connections.

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Important Information

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The screens are formed on a PC with Windows 7.

If you are using another version of Windows, the screens have a slightly different appearance.

- Machine does not boot/ start up
- LED lights are on but no image on screen

Press the power button



 The machine is running but can hear a failure warning tone

The machine is running but can hear a failure

Rack model: check power cable / two is needed





warning tone

The machine is running but can hear a failure
 Warning tone

Check for defect Fan/

contact your local



- The machine is running but no image on the screen
- No network connection
- No sound

Check cable connection and reboot the machine



	Backplane I/O Pa	inel	
A. USB 2.0 Port 0	H. Gb LAN Port 1	N. Center/LFE Out	
B. USB 2.0 Port 1	I. USB 3.0 Port 6	O. Surround Out	7
C. HDMI Port	J. USB 3.0 Port 7	P. S/PDIF Out	
D. VGA Port	K. Gb LAN Port 2	Q. Line In	HD Audio
E. DVI Port	L. USB 3.0 Port 4	R. Line Out	
F. Thunderbolt Port	M. USB 3.0 Port 5	S. Mic In	
G. CMOS Reset		1	

- The rack rails does not fit the rack cabinet

Extending the Rails



 The machine does boot up, no LED lights power cables is connected to PSU no warning tone

Contact your local dealer

Read hardware manuals supplied with the machine for more information

Ernitec server software (excluding VMS system) Checkups Part 1.

Please notice that in part 1 of this document - none of the questions here urge you to change anything on your server just reply to each question - without changing anything.

- a. Have you followed the guide above hardware guide?
 = Yes continue to next question
 = No Follow the above guide
- b. Are you able to operate your server? Is Microsoft Windows running and can you operate your mouse and keyboard?
 - = Yes Continue to next question
 - = No Follow the hardware guide above. And continue If it still does not work
- c. Have you tried shutting down the server and starting it up again did it solve your problem?
 - = Yes There is no problem with your server
 - = No Continue to next question.
- d. What exact symptoms is your server showing?

e. What do you think the problem is?

f.	Do you think your server problems are related to Surveillance software installed
	on your server?

	`	<u> </u>		o	. .			
_	VAC -	('ontact	VOUR '	Survoillan		iara cunr	NUMP TOP	cunnort
_	103-	CUIIIaU	vour	Suiveillair		aie suur		SUDDOL
			J					

= No - Continue to next question

g. Do you think your server problems are related to Microsoft Windows installed on your server?

= Yes -	Please	write v	why a	nd c	ontinue	and	continue	to nex	xt question	

 \square = No - Continue to next question

h. Do you think your server problems are related to the physical hardware in your server?

 = Yes - Please write why and continue to next question

Part 2.

Please notice that in part 2 of this document - some questions will ask you to change some settings, but if you follow this guide you will be able to restore back to before Part 2 of this document.

Any changes made is your own responsibility.

Ernitec Smart Recovery

Ernitec ESR is preinstalled on all servers that has the "ESR" name in the model name.

a. Before making any changes to you system we urge you to reboot your server and use Ernitec ESR to create an image:

Reseller 1 or Reseller 2 or Customer image

The backup / image will be an exact copy of the current system on the c: drive This backup will do an exact copy of your c: drive

(Please notice that a backup does not change any data on your system - it's just a backup of whatever is installed on your c: drive)

When you have completed the ESR backup your server will now have two images

Read appendix "A" on how to operate Ernitec ESR software.

Antivirus, Firewall, hot fixes and updates

Before using any of these options please check if your problem been resolved before continuing to the next question.

a. Antivirus.

Uninstall any third party antivirus / internet security programs installed on your server (Microsoft defender, Norton, Symantec, AVG, Avast etc)

Read appendix "B" on how to uninstall programs from Microsoft Windows

b. Firewall.

Disable the Microsoft Windows firewall or any other Firewall installed on your server.

Read appendix "C" on how to disable the Microsoft Windows Firewall.

c. Hotfixes.

Identify your servers model name and number (the information is printed on the side of your server) – Example Build-ESR1800

Visit <u>http://files.ernitec.com</u> and browse to "Surveillance servers" and locate your model and download hotfixes for your server model. Remember to read the readme file for Each Hotfix to identify if you need/want to install the hotfix.

d. Updates

Identify your servers model name and number (the information is printed on the side of your server) – Example Build-ESR1800

Visit <u>http://files.ernitec.com</u> and browse to "Surveillance servers" and locate your model and download drivers for your server model. Compare what you downloaded with files on your server in the directory c:\ernitec . Update drivers that are newer than the ones installed on your server.

e. Updates – extension boards

Identify your servers model name and number (the information is printed on the side of your server) – Example Build-ESR1800

Visit <u>http://files.ernitec.com</u> and browse to "Surveillance servers" and locate your model and download drivers for your server model. Compare what you downloaded with files on your server in the directory c:\ernitec

Update drivers that are newer than the ones installed on your server.

If you are in doubt what "version" of drivers you have on your system please write an e-mail to <u>support@ernitec.com</u> with the model and serial number of your server and we will supply the information.

Ernitec ESR.

If the problem is still there.

- a. Please make a backup of any essential software, licenses and such that you need / has been installed after receiving your server. Copy these to CD-ROM or USB key.
- b. Use Ernitec ESR via boot F6 menu to restore "Ernitec Factory image"

Read appendix "D" on how to use Ernitec ESR to reinstall Factory image.

c. Without installing ANY new software / Windows update / changing anything is the problem still there?

 \Box = Yes - Go to part 3.

= No - There is no problem with your Ernitec server or Windows installation, go to next question.

- d. Install your surveillance software. Is there a problem with your server / is the original problem back?
 - Yes Please contact your surveillance software supplier for support
 - = No Your server works fine after a manual reinstallation.

Part 3.

Apparently, there is something not working the way it is supposed to. To be able to help you, please fill out the next questions and send this entire rapport to <u>support@ernitec.com</u>

System description:

- a. Server model name (Written on the white sticker on the server)
- b. Server serial number (Written on the white sticker on the server)
- - 🗌 = No

Contact information:

- a. Reseller company name:
- b. Reseller contact person name:
- c. Reseller contact phone number:
- d. Reseller contact e-mail address:

List programs installed – example: Ernitec EVR, Milestone – etc.

List programs:

What happened:

- a. For how long has your server been running without any errors? minutes/hours/days
- b. Before having this problem did you install or update any software if yes what?
- c. Before having this problem did you update any drivers? if yes what?
- e. Before having, this problem did your server shutdown unexpectedly / power failure?

 I = No
 I = Yes

If Yes:	
\square = How many times ? :	

- f. What Windows version is installed on your server (Please follow appendix "E")

IP setup of your server

a.	Please fill out this form comple	etely for network setup	
	IP address:		
	Is IP setup running DHCP ?:		
	Subnet address:		
	Gateway:		
	DNS 1 and/or DNS 2:		
	Network card 2 name:		
	IP address:		
	Is IP setup running DHCP ?:		
	Subnet address:		
	Gateway:		
	DNS 1 and/or DNS 2:		

Follow appendix "F" on how to find IP setup information for your server

Microsoft Windows:

Please inform:

a. Is the operating system part of a Microsoft Windows domain?

	=	Y	es
_			

🗌 = No

Please follow appendix "G" if you don't know how to find the information

- b. Is Microsoft Windows auto update enabled or disabled?
 - 🗌 = Yes
 - 🗌 = No

Please follow appendix "H" if you don't know how to find the information

Log files.

Please look though log files and look for significant errors.

a. Launch "Windows event viewer" and look for significant errors and report them here:

Please follow appendix "I" if you don't know how to find the log files

Teamviewer:

Launch Teamviewer and report ID and password
(The program is located on the desktop or in c:\ernitec folder)
Teamviewer ID
Teamviewer Password

Send this entire document – filled out on all points to <u>support@ernitec.com</u> and we will Make contact as soon as possible.

Other information:

Please write other information you find relevant about your problem:

Appendix "A"

How to operate Ernitec ESR software.

a. Reboot or start your server and look for this screen during boot process and press F6 to start ESR software.

Press F6 to start ernitec SMART recovery or to update your existing image ...

- b. Now choose what image you want to write / overwrite. Choose between
- c. Update Reseller Image 1 (*Password required)
- d. Update Reseller Image 2 (*Password required)
- e. Update Customer Image (No password required)

* Passwords are printed on short manual and delivered with your server If you don't have it, then your reseller will have it – or can obtain the passwords by writing to <u>support@ernitec.com</u>

ernitec SMART Recovery		<u>-0×</u>
ernitec SMART	Recovery	۲
Create/update images	Create/update images	/
Restore images	Hopdate Factory Image The factory image will be updated. Password protected!	
Tools	Populate Reseller Image 1 Reseller image 1 will be created or updated. Password protected!	Ý
Support Contacts	Control Contro Control Control Control Control Control Control Control Control Co	
	The customer image will be created or updated.	
		Restart O Shutdown

f. When you have completed the "Update Reseller or customer Image" you now have a backup of your current configuration and the Ernitec Factory image, so two images in total to choose from later on.

Please notice that the backup ONLY contains whatever is installed on the C: drive of your server. Also please notice that the "Update Reseller or customer image" does not change any settings on your server – it's just a backup you can use later to get back to this exact point in time.

Appendix "B"

How to look for and uninstall programs from Microsoft Windows 7.

- a. Click Start and choose "Control panel"
- b. Locate "Programs" and choose "Uninstall a program"
- c. If you cannot locate "Uninstall a program" then click start and write in the field "search" Programs and features and click on the finding.
- d. If no antivirus is installed it should look like this

Control Panel Home View installed updates	Uninstall or change a program To uninstall a program, select it from the list and then	click Uninstall, Change, or Repair.			
off	Organize 👻				
	Name	Publisher	Installed On	Size	Version
	Z Adobe Flash Player 12 ActiveX	Adobe Systems Incorporated	25/02/2014	6.00 MB	12.0.0.70
	Adobe Reader XI (11.0.06)	Adobe Systems Incorporated	26/02/2014	127 MB	11.0.06
	🐲 AMD Catalyst Install Manager	Advanced Micro Devices, Inc.	25/02/2014	26.0 MB	8.0.915.0
	Intel(R) Network Connections 18.8.136.0	Intel	25/02/2014	26.9 MB	18.8.136.0
	3 Intel® Graphics Driver	Intel Corporation	06/03/2014	74.2 MB	10.18.10.3325
	3 Intel® Management Engine Components	Intel Corporation	25/02/2014	20.4 MB	9.0.0.1323
	Rapid Storage Technology enterprise	Intel Corporation	07/07/2014		4.0.0.1040
	3 Intel® USB 3.0 eXtensible Host Controller Driver	Intel Corporation	25/02/2014	18.4 MB	2.5.0.19
	🕌 Java 7 Update 51	Oracle	25/02/2014	118 MB	7.0.510
	MegaRAID Storage Manager v5.00.1200	LSICorp	26/02/2014		5.00.1200
	Microsoft .NET Framework 4.5.1	Microsoft Corporation	25/02/2014	38.8 MB	4.5.50938
	Microsoft Visual C++ 2010 x64 Redistributable - 10.0	Microsoft Corporation	25/02/2014	13.8 MB	10.0.40219
	Microsoft Visual C++ 2010 x86 Redistributable - 10.0	Microsoft Corporation	25/02/2014	11.1 MB	10.0.40219
	Microsoft Visual C++ 2012 Redistributable (x64) - 11.0	Microsoft Corporation	25/02/2014	20.4 MB	11.0.50727.1
	Microsoft Visual C++ 2012 Redistributable (x86) - 11.0	Microsoft Corporation	25/02/2014	17.3 MB	11.0.50727.1
	BRenesas Electronics USB 3.0 Host Controller Driver	Renesas Electronics Corporation	25/02/2014	885 KB	3.0.23.0
	5 Thunderbolt(TM) Software	Intel(R) Corporation	25/02/2014	1.55 MB	1.0.5.10

e. If example Avast antivirus is installed locate it and click on the program and then in the top click uninstall

Control Panel	All Control Panel Items Programs and Features		👻 🍫 Sec	rch Programs a	nd Features
Control Panel Home View installed updates Turn Windows features on or	Uninstall or change a program To uninstall a program, select it from the last and then	click Uninstall, Change, or Repair.			
Control Panel Home View installed updates Turn Windows features on or off	Organize - Uninstall Change				833 -
	Name	Publisher	Installed On	Size	Version
	Adobe Flash Player 12 ActiveX	Adobe Systems Incorporated	25/02/2014	6.00 MB	12.0.0.70
	Adobe Reader XI (11.0.06)	Adobe Systems Incorporated	26/02/2014	127 MB	11.0.06
	🔆 AMD Catalyst Install Manager	Advanced Micro Devices, Inc.	25/02/2014	26.0 MB	8.0.915.0
	O Avast Free Antivirus	AVAST Software	12/11/2014		10.0.2208
	Intel(R) Network Connections 18.8.136.0	Intel	25/02/2014	26.9 MB	18.8.136.0
	🔠 Intel® Graphics Driver	Intel Corporation	06/03/2014	74.2 MB	10.18.10.3325
	14 Intel® Management Engine Components	Intel Corporation	25/02/2014	20.4 MB	9.0.0.1323
	😢 Intel® Rapid Storage Technology enterprise	Intel Corporation	07/07/2014		4.0.0.1040
	1 Intel® USB 3.0 eXtensible Host Controller Driver	Intel Corporation	25/02/2014	18.4 MB	2.5.0.19
	🕌 Java 7 Update 51	Oracle	25/02/2014	118 MB	7.0.510
	MegaRAID Storage Manager v5.00.1200	LSICeep	26/02/2014		5.00.1200
	Microsoft .NET Framework 4.5.1	Microsoft Corporation	25/02/2014	38.8 MB	4.5.50938
	Microsoft Visual C++ 2010 x64 Redistributable - 10.0	Microsoft Corporation	25/02/2014	13.8 MB	10.0.40219
	Microsoft Visual C++ 2010 x86 Redistributable - 10.0	Microsoft Corporation	25/02/2014	11.1 MB	10.0.40219
	Microsoft Visual C++ 2012 Redistributable (x64) - 11.0	Microsoft Corporation	25/02/2014	20.4 MB	11.0.50727.1
	Microsoft Visual C++ 2012 Redistributable (x86) - 11.0	Microsoft Corporation	25/02/2014	17.3 MB	11.0.50727.1
	🕞 Renesas Electronics USB 3.0 Host Controller Driver	Renesas Electronics Corporation	25/02/2014	885 KB	3.0.23.0
	Of Thunderbolt(TM) Software	Intel(R) Corporation	25/02/2014	1.55 MB	1.0.5.10

Appendix "C"

How to disable Microsoft Windows Firewall.

- a. Click Start and choose "Control panel"
- b. Locate Network and Internet and choose "View network status and tasks"
- c. Locate and choose "Windows Firewall"
- d. If you cannot locate "Windows Firewall" then click start and write in the field search Windows Firewall and click on the findings.
- e. In the left side choose option "Turn Windows Firewall on or off"
- f. When the Firewall is disabled it should look like this:

	lindows Firewall & Customize Settings	- 40	Search Control Banel	
<u> </u>	Andows mewan y Customize Settings	• •7	Search Control Parier	_
Custor	nize settings for each type of network			
Custor	The settings for each type of network	1		
You can	modify the firewall settings for each type of network	location that you	u use.	
what are	enetwork locations?			
Home o	r work (private) network location settings			
9	Turn on Windows Firewall			
	Block all incoming connections, including the	iose in the list of	allowed programs	
	Notify mewhen Windows Firewall blocks a r	iew program		
8	 Turn off Windows Firewall (not recommended) 		and the second second	
Dublic p	stuark location settings			
Public II	Turn on Windows Firewall			
S	Plackall income and include at	and in the link of	- Harrison and a second	
	Block all incoming contractions, including th	lose in the list of	allowed programs	
	V Notify mewhen Windows Firewall blocks a r	iew program		
8	 Turn off Windows Firewall (not recommended) 			
			OK Ca	ncel

Appendix "D"

How to use Ernitec ESR to restore the Ernitec factory image.

a. Reboot or start your server and look for this screen during boot process and press F6 to start ESR software.

Press	F6	to	start	ernitec	SMART	recoverv	or	to	uvdate	vour	existing	імасе	
11033			Start	01111000	OTHINT	1 CCOVCI y	01		apaato	your	CAISting	THEGO	

- b. Now choose "Restore images in the left side
- c. Now choose "Restore Factory Image"

	Create/update	Restore images	
	Restore images	Restore Factory Image All custom settings will be overwritten.	
.	Tools	All custom settings will be overwritten.	
8	Support Contacts	All custom settings will be overwritten.	
		All custom settings will be overwritten.	

d. Click okay to overwrite existing installation. (Keep in mind that ALL existing data on the C: drive will be deleted and the Ernitec Factory image will be installed.

Appendix "E"

Find out what version of Windows is installed on your server.

a. Click on start and write in the search field - system - and choose "System"

Programs (4)
🐌 Create a System Repair Disc
🖾 System Configuration
👰 System Information
Control Panel (48)
🕎 System
🕎 Edit the system environment variables
🕎 Restore system files and settings from a restore point
Music (3)
🔊 Kalimba 🍾
Maid with the Flaxon Hair
🔊 Sleep Away
Pictures (8)
🔄 Chrysanthemum
🔄 Jellyfish
See more results
The stand
system × Shut down *

b. From an image like this – look at the two red arrows. On this system the details are Windows 7 Ultimate – 64-bit operating system.



Appendix "F"

How to find IP setup of your server.

- a. Click Start and choose "Control panel"
- b. Locate Network and Internet and choose "View network status and tasks"
- c. If you cannot locate "View network status and tasks" then click start and write in the field search Network and Sharing center" and click on the findings
- d. By default your server has two network cards. If both are in use, both will show up In the "Network and Sharing Center"
- e. For each network click on the blue text next to "Connections"

Control Panel Home	View your basic network informat	ion and set up conner	tions	(
Change adapter settings			= See full map	
Change advanced sharing settings	E20140059 Multi (This computer)	iple networks	Internet	
	View your active networks	10	Connect or disconnect	
	Network	Access type:	Internet	
	Work network	Connections:	Local Area Connection	
	Unidentified network	Access type: Connections:	No Internet access	

f. After clicking on "Local Area Connection" click on Details:

eneral		
Connection —		1.1
IPv4 Connec	tivity:	Internet
IPv6 Connec	tivity:	No Internet access
Media State:		Enabled
Duration:	and the second sec	01:37:16
Consider	1	1.0 Gbos
Details	*	
Activity	4	
Activity —	Sent —	— Received
Activity	Sent — 23,020,228	Received

g. The information in the red areas are the information you are looking for

Property	Value	
Connection-specific DN	mydomain	
Description	Intel(R) I210 Gigabit Network Connect	
Physical Address	0C-C4-7A-00-45-01	l
DHCP Enabled	Yes	l
IPv4 Address	192.168.1.238	l
IPv4 Subnet Mask	255.255.255.0	l
Lease Obtained	12 November 2014 13:20:25	
Lease Expires	13 November 2014 14:29:06	ľ
IPv4 Default Gateway	192.168.1.1	l
IPv4 DHCP Server	192.168.1.1	l
IPv4 DNS Servers	192.168.1.1	l
	192.168.1.1	l
IPv4 WINS Server		l
NetBIOS over Topip En	Yes	l
Link-local IPv6 Address	fe80:f05ff94e:2679:992f%11	ļ
IPv6 Default Gateway		

Appendix "G"

How to find out if the operating system is part of a Microsoft active directory domain.

a. Click on start and write in the search filed - system - and choose "System"



b. From an image like this – look at the red arrow. If it says Domain and then a domain Name then it is a member of this Microsoft Windows Active directory domain.

If it says Workgroup – then it's a member of this Microsoft Windows workgroup

	II Control Daniel Items . Sustan	a An Sauch Caster De	
Control Panel Home Device Manager Remote settings	View basic information Windows edition Windows 7 Ultimate	n • • • • • • • about your computer	
System protection Advanced system settings	Copyright © 2009 Microso Service Pack 1	ft Corporation. All rights reserved.	
11	System		
A NO	Rating:	4,2 Your Windows Experience Index needs to be refreshed	
	Processor:	Intel(R) Xeon(R) CPU E3-1275 v3 @ 3.50GHz 3.50 GHz	
	Installed memory (RAM):	8.02 GB (7.90 GB usable)	
A	System type:	64-bit Operating System	
A CONTRACTOR	Pen and Touch:	No Pen or Touch Input is available for this Display	
	Computer name, domain, and	workgroup settings	
1	Computer name	E20140059	PChange settings
	Full computer name:	E20140059	
	Computer description:	×	
	Workgroup:	WORKGROUP	
See also	Windows activation		
Action Center	Windows octivation		-
Windows Update	Product ID: 00426-0EM-01	54295-42697 Change product key	genuine
Performance Information and Tools	Product 10: 00420-0EWI-91	change product key	Microsoft software Learn more onlin

Appendix "H"

How to find out if Microsoft Windows update is enabled or disabled.

a. Click on start and write in the search field - system - and choose "System"



b. Choose "Change settings"



c. Here you will see what setting Windows update has:

🕥 - 🖉 « All Control	Panel Items 🔸 Windows Update 🔸 Change settings 🔹 🔹 🤧 Search Control Panel	
Choo	e how Windows can install updates	
When y using th comput	our computer is online, Windows can automatically check for important updates and install them ese settings. When new updates are available, you can also install them before shutting down the er.	a rank
How do	es automatic updating help me?	
Import	ant updates	
	Never check for updates (not recommended)	
	Install updates automatically (recommended) Download updates but let me choose whether to install them Check for updates but let me choose whether to download and install them	
Param	Never check for updates (not recommended)	

Appendix "I".

How to launch "Windows event viewer" and look for significant errors:

a. Click on "start" and write - eventvwr.msc - in the search field and click on the finding Eventvwr.



b. Click on Windows Logs and on system



- c. Look through the logs especially for the tab "Level" where it says "Error"
 - Look for errors
 - Look for Critical
 - Look for disk failures
 - Look for NTFS errors
 - Look for DMIO errors
 - Look at what happens before an error by using date and time
 - In general look for things that does not look right
- d. Right click the Systems log and press "Save All Events As.."



And then click on Desktop as the place to save the file and name the file with serial number of server – system – example E20150213 – system



Attach this file to the e-mail with this document.

e. Do the same with the log file called programs.