

User's Manual

Version 1.01 - July 2010

XNet MONITOR



EVS SNMP Monitoring



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IMPROVEMENT REQUESTS

Your comments will help us improve the quality of the user documentation. Do not hesitate to send improvement requests, or report any error or inaccuracy on this user manual by e-mail to doc@evs.tv.

REGIONAL CONTACTS

The address and phone number of the EVS headquarters are mentioned in the **Help > About** menu in the user interface.

You will find the full list of addresses and phone numbers of local offices on the EVS website, on the following page:

<http://www.evs.tv/Europe,+Middle+East+Africa/English/Contact-us/Contact-Us/Regional-contacts-new-/page.aspx/2038>


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What's New?

The changes linked to new features in version 1.01 are listed in the table below. Click the section number in the table to jump directly to the corresponding section.



In the user manual, the icon  has been added on left margin to highlight information on new and updated features.

STATUS ON CHAPTERS UPDATES FOR XNET MONITOR V 1.01

Subject	
Section 3.2.1	Additional Application Settings
Section 3.3.2	Updated content of the Monitoring Data pane displayed for a host different than a server.
Section 3.3.3	Reorganization of the Server data within 5 tabs.
Section 3.3.4	Possibility to extract server information in an html file.
Section 3.5	Possibility to take the control of a LSM remote device.
Section 3.6	Possibility to take the control of a server desktop.
Section 3.8	Possibility to upload keywords on servers.

1. Introduction

1.1 PURPOSE

XNet Monitor is a tool aimed at monitoring EVS products. XNet Monitor displays real time information and status about the servers as well as past alert and warning messages.

XNet Monitor uses the SNMP (Simple Network Management Protocol) protocol to request and receive monitoring data from the servers. These internal status data are defined in the MIB (Management Information Base) on each server.

One XNet Monitor application can monitor several servers while one server may also be monitored by several XNet Monitors or similar applications.

XNet Monitor is mainly a monitoring application that cannot act on the monitored servers. The only possible remote actions are Multicam update, server reboot, and remote control.

1.2 INSTALLATION

1.2.1 REQUIREMENT

- PC compatible computer
- Supported OS: Windows XP, Windows Vista or Windows 2003 Server
- .Net framework 3.0 or higher installed

1.2.2 RECOMMENDATION

The SNMP information is available through the PC LAN connector of the server. The XNet Monitor running computer should be connected to the same network, and not on any of the Gigabit Ethernet ports of the servers. These ports are dedicated to high flow video data and cannot be used for any other purpose.

1.2.3 INSTALLATION

XNet Monitor is delivered as a single executable file.

To install the program, run this installation file. During the installation, a warning will be displayed if .Net framework is not installed on your computer. In this case, you should manually install this.

If you need to install the .Net framework, double-click the `DotNet 3.5 SP1 Install3.bat` file, which is delivered with the XNet Monitor executable file.

During XNet Monitor installation, the only required parameter is the installation path for the application. If you want to change the default one, enter the desired path.

Once the application is installed it can be executed immediately.

1.2.4 UPDATE

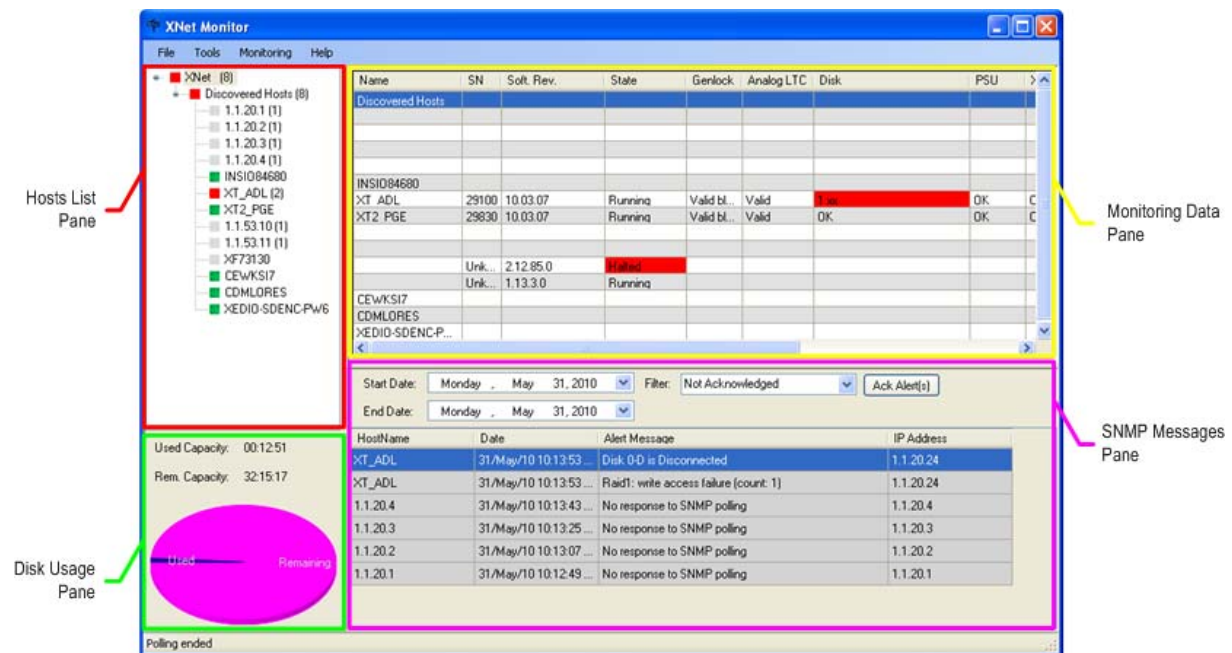
If an older version of XNet Monitor is already installed on your computer, it will be automatically removed and replaced by the new one.

1.3 UNINSTALL

The XNet Monitor application must be removed through Windows Control Panel and **Add or Remove Programs** menu.

2. Configuration

2.1 USER INTERFACE

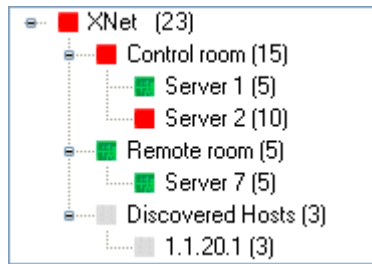


The window is divided in 4 panes:

- The Hosts List pane displays the monitored servers in a user-defined tree architecture.
- The Monitoring Data pane displays the selected server information.
- The Disk Usage pane displays a pie chart with the totalized used and left disk space for the selected server(s).
- The SNMP Messages pane displays the SNMP alert and warning messages for the selected period and enables the user to acknowledge them.

2.2 HOSTS LIST

The Hosts List pane displays the monitored servers on the network. They are listed in a tree architecture independent of the network architecture as shown on the following figure.



2.2.1 XNET

The higher node is called XNet as it represents the EVS XNet proprietary network. Under this first level node, you must add one or more groups. These groups are only virtual groups used for easy organization and management of multiple servers.

2.2.2 GROUPS

To add a new group, right-click on the XNet node and select **Add group**, the only available command. Enter a representative group name.

As this is only a virtual layout, we recommend that you organize the groups based on physical localization of servers for easier management.

To remove a group, right-click on it and select the **Remove** command.

2.2.3 HOSTS

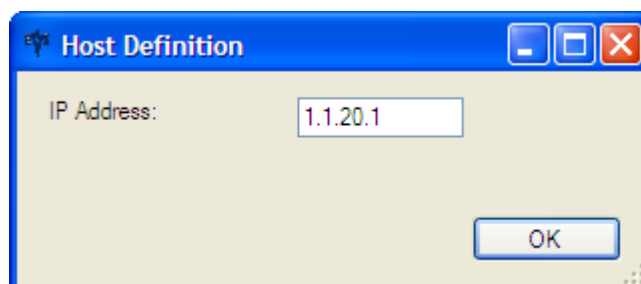
Once the groups are ready, you can add servers or hosts to them.

You can add hosts to XNet Monitor in two ways:

HOW TO ADD HOSTS MANUALLY

To add individual hosts manually, proceed as follows:

1. Right-click on a group and select the **Add host** command
2. Enter the host IP address in the Host Definition window.

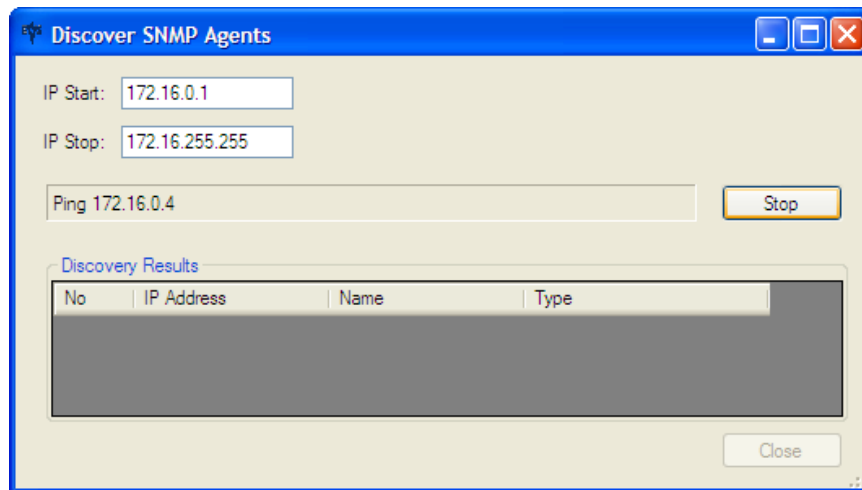


Once the hosts are entered in the list manually, you can organize them in the different groups by drag-and-drop operation.

HOW TO ADD HOSTS AUTOMATICALLY

1. Open the **Tools** menu and select **Discover**.

The Discover SNMP Agents window opens



2. In this window, set the start and stop IP addresses between which the program will look for available servers and hosts
3. Click on the **Start** button to start the discovery process.

At the end of this process, the discovered hosts will be listed in a new group called Discovered Hosts.

Once the hosts are entered through the discovery process, you can organize them in the different groups by drag-and-drop operation.



Note

As this process is based on timeout for not used addresses, it may take some time to parse a long list.

HOW TO REMOVE A HOST

You can only remove a host when the monitoring is not started.

To remove a host, right-click on it and select the **Remove** command.

2.2.4 SUMMARY INFORMATION

In the Hosts List pane, the bullet color has the following meaning:

- A red bullet means that there is a warning and/or an error on a host.
- A green bullet means that everything is ok for that item.

The number between brackets next to an item indicates the number of pending SNMP alert messages.

3. Monitoring

3.1 START MONITORING

Once servers and hosts have been added in the groups, the monitoring is started by clicking on the **Start** command in the **Monitoring** menu.

To stop the monitoring once it is running, simply click on the **Stop** command in the same **Monitoring** menu.

The monitoring status is available in the status bar at the bottom of the XNet Monitor window.



- 'Polling not started' means that the monitoring has not been started yet since the application launch.
- 'Polling' followed by IP address means status data are presently read from the selected host MIB.
- 'Waiting x/y sec' indicates that the monitor is waiting for next polling process. It has already been waiting for x seconds out of a total of y seconds (according to related parameter setting).
- 'Polling ended' means that the monitoring has been stopped by the user. At monitoring restart, hosts will be immediately polled and the waiting period will be reset.



Note

At XNet Monitor start-up, the monitoring is always stopped and must be started manually using the **Start** command.

3.2 CONFIGURATION

A few parameters can be set to configure display and monitoring according to your needs.

3.2.1 APPLICATION SETTINGS



In the **Settings** command in the **Tools** menu, you can set following parameters:

Parameter	Description
# Local Clip Threshold	When this number of clips is reached on a machine, a message will be displayed to warn the user that a cleaning and purge will soon be necessary on that server.
Rem. Cap. Threshold	Same warning as the previous one but based on the server remaining storage capacity.
SNMP Polling Period	Wait time between polling. A small period will guarantee fast refreshing of data but will request high data flow on the network while a long period will display less up-to-date data but will reduce the load on the network.
SNMP Time Out	Delay after which a host will be considered as not responding. An alert message will be displayed in the event log if such an event happens for a monitored host. The automatic discovery process total duration depends on this parameter.

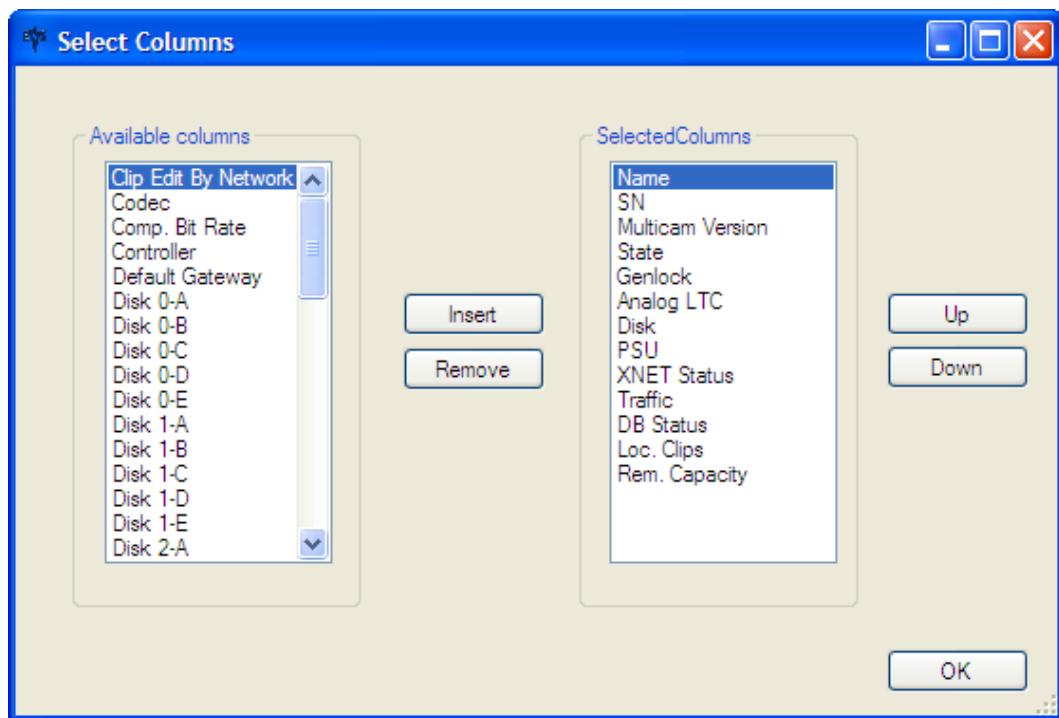
Parameter	Description
Enable Gigabit ICMP Polling	Enables the pinging of the Servers GBE ports.
ICMP Time Out	Time Out for the pinging of the Servers GBE ports
Enable Server Reboot	If this option is enabled, XNet Monitor will be able to initiate a reboot of any monitored server through the Reboot command in the contextual menu opened by right-clicking on a host in the Hosts List pane.
Enable SNMP Log	If this option is enabled, XNet Monitor will keep a log file with all SNMP messages.
Enable Server Explorer	Enables the Explore option from the Server Name contextual menu in the Hosts List pane. The Explore option opens a ftp session on the server.
Enable LSM Remote	Enables the LSM Remote option from the Server Name contextual menu in the Hosts List pane.
Server Log Target Directory	Path to the directory used to store the SNMP log files.
Temp. Unit	Unit in which the temperature is expressed.
Click on the OK button once the parameters are properly configured for your application.	

3.2.2 DATA DISPLAY

When you select XNet or a group in the Hosts List pane, the Monitoring Data pane displays a table with a number of columns. In this table, you will find summary data about the servers available under XNet or under the selected group.

CUSTOMIZING THE DATA DISPLAY

You can specify which information should be displayed in the Monitoring Data pane and how it should be displayed in the **Select Columns** window. To access this window, select the **Organize Columns** command from the **Tools** menu



The following actions are possible:

- To add a column to the display list, select it in the left **Available columns** list and click on the **Insert** button.
- To remove a column from the table, select it in the right **SelectedColumns** list and click on the **Remove** button.
- To change the columns order, select a column name in the right **SelectedColumns** list and move it up or down in the list using the **Up** and **Down** buttons respectively.

Click on **OK** once the columns are organized as desired.

3.3 INFORMATION DISPLAY

The Monitoring Data pane displays the following information according to the selected item in the Hosts List pane:

- A summary of underlying hosts if XNet or a group is selected.
- An empty table for the host SNMP parameters and their respective values if the selected host is not a server.
- A specific parameters display table if the selected host is a server.

3.3.1 SUMMARY OF HOSTS DATA

If XNet or a group is selected, the Monitored Data pane displays a summary of underlying hosts parameters as shown on the following figure.

The available columns are selected and organized from the **Organize Columns** option available in the **Tools** menu.

Name	SN	Soft. Rev.	State	Genlock	Analog LTC	Disk	PSU	XNET Status	Traffic	DB Status	Loc. Clips	Rem. Capac
T02												
ELM SE04	28690	10.03.13	Running	Valid bl...	Valid	OK	OK	Connected	Normal	Ok	44	51:54:32 [68]
ELM MA03	20360	10.03.13	Running	Valid bl...	Valid	OK (0 sp)	OK	Connected	Normal	Ok	5381	100:02:25 [95]
ELM MA02	19220	10.03.13	Running	Valid bl...	Valid	OK	OK	Stand-alone	Normal	Ok	30	79:11:56 [95]
XS	15670	10.03.13	Running	Valid bl...	Valid	OK	OK	Connected	Normal	Ok	13	53:16:40 [95]
T03												
No SDTI	15920	10.01.67	Running	Detected	Detected	OK	OK	Stand-alone	Normal	Ok	246	20:55:26 [95]



3.3.2 HOST SNMP DATA

Presently, if a host other than a server is selected, the Monitored Data pane will display 2 tabs.

STATUS TAB

In the Status tab, the main parameters are organized in several group boxes as shown on the following figure.

Status

Mib Browser

Evs Products

Type	Version	State	Custom Name
XFile	2.12.89.0	Halted	Unknown
XTAccess	1.13.9.0	Running	Unknown

Computer

Name:

XF73130

CPU Usage:

0% 0%

Physical Memory:

489 / 997 MB (49 %)

Up Time:

21:49:17.04

Date Time:

2010-06-02 19:49:25

Drives

Name	Total Size	Free Space
Restore (R)	19.5 GB	14.0 GB
XT7 (F)	465.8 GB	28.1 GB
XT7 (E)	465.8 GB	444.4 GB
System (C)	19.5 GB	6.7 GB

Interfaces

Description	Status	MTU	Speed	Phys. Address	IP Address	Net Mask	NIC IN	NIC OUT
Intel(R) 82566DC...	Down	1500	1000 Mbps	01cc04a8ef7	0.0.0.0	0.0.0.0	126	
Intel(R) PRO/100...	Up	1500	1000 Mbps	01517766bd2	128.1.2.2	255.255.255.0	2,801,699	63,825
Intel(R) PRO/100...	Up	1500	1000 Mbps	015176fe98f	1.1.53.12	255.255.0.0	20,783,986	20,697,299

The different group boxes and their parameters are detailed hereafter.

EVS Products

Parameter	Description
Type	EVS application name.
Version	Server software revision.
State	Server state: running, in maintenance, faulty, halted, unknown.
Custom Name	Name given to the product from the MIB.

Computer

Parameter	Description
Name	Name of the computer.
CPU Usage	Percentage of use of central processing unit (CPU).
Physical Memory	Computer data storage used from the total amount.
Up Time	Elapsed time since the last boot.
Date Time	MTPC date and time.

Drives

This area lists the hard disks drives from the computer.

Parameter	Description
Name	Name of the computer.
Total Size	Total size (GB) of the drive.
Free Space	Free space (GB) still available on the drive.

Interfaces

Parameter	Description
Description	Generic description of the communication interface.
Status	Up or Down
MTU	Maximum Transmission Unit: size (in bytes) of the largest protocol data unit that the layer can pass onwards.
Speed	Data transfer rate in Megabits per second.
Phys. Address	Memory address that is electronically (in the form of binary number) presented on the computer address bus circuitry in order to enable the data bus to access a particular storage cell of main memory.
IP Address	Internet Protocol address of the communication interface.
Net Mask	Prefix bit mask expressed in quad-dotted decimal representation. For example, 255.255.255.0 is the subnet mask for the 192.168.1.0/24 prefix.
NIC IN	Number of octets getting through the network (input)
NIC OUT	Number of octets getting through the network (output)

MIB BROWSER TAB

Refer to section 'Mib Browser Tab' on page 22 for an overview of the MIB Browser tab.



3.3.3 SERVER MIB DATA

If a server is selected, the Monitored Data pane displays its MIB parameters in 5 tabs each displaying a specific table.



Note

If Multicam is not active and running on the selected server, most of the parameter fields will be left blank.

STATUS TAB

In the Status tab, the main parameters are organized in several group boxes as shown on the following figure.

The screenshot displays the 'Status' tab of the XNet Monitor interface. It features several sections for configuring and monitoring the server:

- General:** Fields for Type (XT[2]+), Custom Name, Serial Number (20310), Version (10.03.13), State (Running), PSU (OK), Genlock (Valid blackburst), LTC (Valid), Number of Clips (101), Rem. Capacity (279.43.04 [99%]), Clip Capacity (Global), Loop Recording (On), Up Time (0:17:19.47), Date Time (2010-04-30 07:16:23), Sync PC to TC (Yes), Period (00:15:00), and PC free disk space (1293 MB).
- Audio-Video:** Fields for Base Config (MulticamLSM), Video (2in 4out), Audio (8 tracks), Standard (525i NTSC), Codec (SD MJPEG Standard), and Comp. Bit Rate (30 Mbps).
- Network:** Fields for SDTI (NoRelay1485), Net Name (@SERV01), Net Number (2), Def\Current Type (Master\Master), Clip Edit by network (No), Nb of Network Clip (235), DB State (Ok), Connection (Connected), and Traffic (Normal).
- Controller \ Protocol:** A table listing ports, controllers/protocols, and connection states.

Port	Controller\Protocol	Connection State
RS422 #1	EVSRemote	Connected
RS422 #2	EVSRemote	Defined
RS422 #3	EVSRemote	Defined
RS422 #4	SonyBVW75	Defined
RS422 #5	SonyBVW75	Defined
RS422 #6	TouchScreen	Defined
Ethernet #50106	LirX	Defined
- Gigabit Connections Settings:** A table for LAN PC, HCTX GBE1, and HCTX GBE2 settings.

	LAN PC	HCTX GBE1	HCTX GBE2
IP Address	172.16.54.2	172.19.54.2	172.21.54.2
IP Mask	255.255.0.0	255.255.0.0	255.255.0.0
Def. gateway	172.16.0.1	172.19.0.1	172.21.0.1
- Channels:** A table listing channels with their status, configuration, and various control parameters.

Name	Status	Config	Rem.Capacity	LTC	User TC	1st Ctrl	2nd Ctrl	Parallel Ctrl	OSD
CAM A	Recording	Recorder (50%)	139:51:32	2010-04-30 13:0...	2010-04-29 21:0...	EVSRemote		Primary	NotApplicable
CAM B	Recording	Recorder (50%)	139:51:32	2010-04-30 13:0...	2010-04-29 21:0...	EVSRemote		Primary	NotApplicable
PGM 1	Playing	Player		2010-04-11 07:2...	2010-04-10 21:1...	EVSRemote		Primary	NotApplicable
PGM 2	Ready	Player		2010-04-11 07:2...	2010-04-10 21:1...	EVSRemote		Primary	NotApplicable
PGM 3	Idle	Player		1970-01-01 00:0...	1970-01-01 00:0...	EVSRemote		Primary	NotApplicable
PGM 4	Idle	Player		1970-01-01 00:0...	1970-01-01 00:0...	EVSRemote		Primary	NotApplicable

The different group boxes and their parameters are detailed hereafter.

General

Parameter	Description
Type	Server type: XT, XT[2]...
Custom Name	Name given to the product from the MIB.
Serial Number	Server unique serial number
Version	Server software revision

Parameter	Description
State	Server state: running, in maintenance, faulty, halted, unknown.
PSU	State of the power supply unit
Genlock	Presence or absence of Genlock synchronization signal
LTC	Status of LTC (Longitudinal Time Code) analogue signal
Number of Clips	Number of clips stored on the server.
Rem. Capacity	Remaining capacity in hours, and percentage.
Clip Capacity	Clip capacity as defined on the server: Global or Per Channel.
Loop Recording	Loop Recording mode as defined on the server.
Up Time	Elapsed time since the last boot.
Date Time	MTPC date and time.
Sync PC to TC	This function synchronizes the internal TC to the timecode read on the LTC input of the server and clears the TC discontinuities detected on the LTC input of the system.
Period	Period at which the Sync PC to TC is applied.
PC Free Disk Space	Available space on the MTPC disk.

Audio-Video

Parameter	Description
Base Config	Base Configuration used to start the server.
Video	Video channels configuration (number of in and out channels)
Audio	Number of audio channels
Standard	Video standard used on the server ports
Codec	Codec used for video digitalization and storage
Comp. Bit Rate	Bit rate of compressed video data

Network

Parameter	Description
SDTI	SDTI (Serial Data Transport Interface) network type
Net Name	Server name on the SDTI network
Net Number	Server identification number on the SDTI network
Def\Current Type	Server type on the SDTI network: master, client, server
Clip Edit by Network	A clip is being transferred and edited or not
Nb of Network Clip	Number of clips stored on the server
Network Clip	Total number of clips stored on the whole network
DB State	Status of the database
Connection	Status of the network connection
Traffic	Network traffic status

Controller | Protocol

Parameter	Description
Port	Server control port identification
Controller\Protocol	Controller or protocol used on that port
Connection State	Control port connection status

Gigabit Connections Settings

Parameter	Description
IP Address	IP address of the interface port
IP Mask	IP mask of the interface port
Def. gateway	Default gateway used by the interface port

Channels

Parameter	Description
Name	Name of the Recorder (CAM) or player (PGM) channel.
Status	Status of the channel: <ul style="list-style-type: none">• CAM: Recording, RecIdle• PGM: Ready, Playing, Live, Idle
Config	Configuration of the channel as Recorder or Player.
Rem. Capacity	Remaining capacity for each recorder channel.
LTC	LTC timecode of the channel.
User TC	User timecode of the channel.
1st Ctrl	Primary controller defined for the selected channel. Possible values are: EVS Remote, EVS XTNano Remote, AVSP, IPDP
2nd Ctrl	Secondary controller defined for the channel, if any.
Parallel Ctrl	Controller used in Parallel Mode.
OSD	OSD controller.

STORAGE TAB

The Storage tab differs according to the type of disks used: SAS or SCSI.

SAS Disks

Status

Storage

Hardware

Codes

Mib Browser

General

Remaining Capacity: 279:43:04 [99%]

Storage type: Sas

Nominal Capacity: 279:51:43

RAID type: (4+1)

RAID

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R1	R2	R3	R4												

Arrays

	PSU	Fans	Thermal
EXT4			
EXT3			
EXT2			
EXT1	OK	OK	OK
INT1	/	/	OK

Disk status

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
EXT4																								
EXT3																								
EXT2																								
EXT1	R2	R2	R2	R2	R3	R3	R3	R3	R3	R4	R4	R4	R4	R4	\$p	\$p	\$p	\$p	\$p	\$p	\$p	\$p	\$p	\$p
INT1	R1	R1	R1	R1	R1	R2																		

Disk temperature

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
EXT4																								
EXT3																								
EXT2																								
EXT1	21	21	21	20	20	20	20	20	20	19	20	20	20	19	20	20	20	19	20	20	20	20	19	19
INT1	37	29	27	24	24	30																		

Disk Details...

SCSI Disks

[Status](#)
[Storage](#)
[Hardware](#)
[Codes](#)
[Mib Browser](#)

General
 Remaining Capacity: 37:47:31 [99%] Storage type: ParallelScsi
 Nominal Capacity: 37:51:07 RAID type: (4+1)

RAID
 1 2 3
 R1

Arrays

	PSU	Fans	Thermal
INT1	/	/	OK

Disk status

	0-A	0-B	0-C	0-D	0-E	1-A	1-B	1-C	1-D	1-E	2-A	2-B	2-C	2-D	2-E
INT1	R1	R1	R1	R1	R1										

Disk temperature

	0-A	0-B	0-C	0-D	0-E	1-A	1-B	1-C	1-D	1-E	2-A	2-B	2-C	2-D	2-E
INT1	38	30	29	32	25										

[Disk Details...](#)

General

Parameter	Description
Remaining Capacity	Remaining capacity of the storage expressed as a video duration (hours, minutes and seconds) as well as a percentage
Nominal Capacity	Total capacity of the storage expressed as a video duration (hours, minutes and seconds)
Storage Type	Type of storage: internal or external
RAID Type	Type of RAID: (4+1) or (5+1)

Arrays

Parameter	Description
PSU	Power supply unit(s) status
Fans	Fans status
Thermal	Temperature status of the system

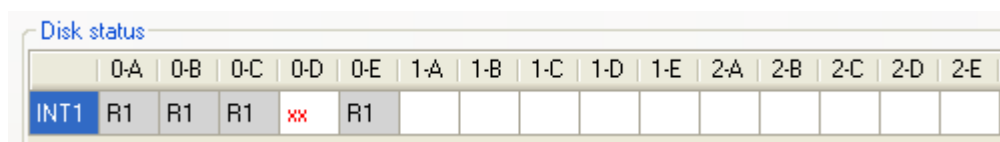
Raid

This area gives indication on the number of RAIDs defined in the server and their respective identification (R1,...)

Parameter	Description
Raid ID	RAID storage system identification

Disk Status

This area gives indication on the localization of each RAID and on the spare disks in the arrays. It also mentions when an error occurred on a disk:



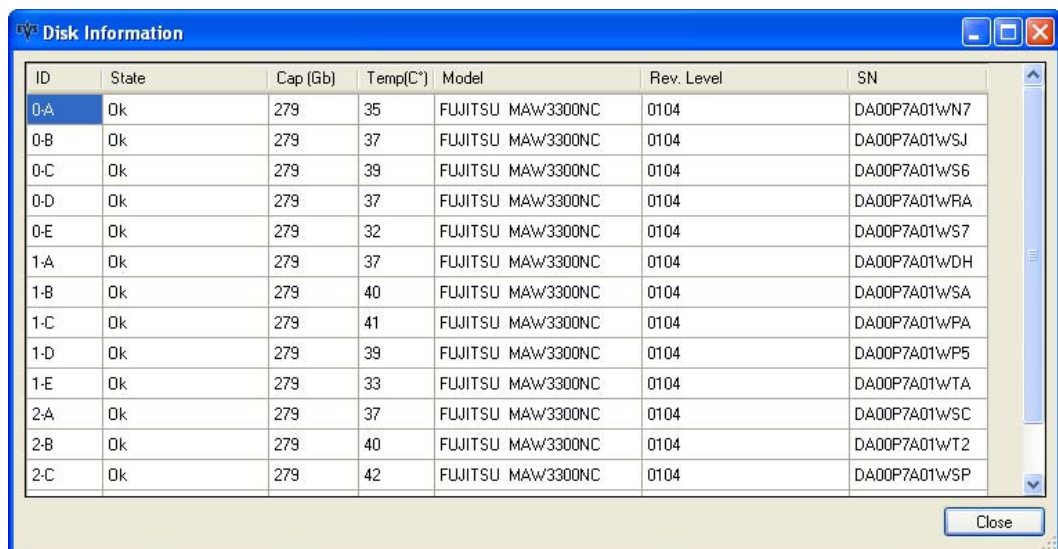
	0-A	0-B	0-C	0-D	0-E	1-A	1-B	1-C	1-D	1-E	2-A	2-B	2-C	2-D	2-E
INT1	R1	R1	R1	xx	R1										

Disk Temperature

This area provides the internal temperature of each disk.

Disk Details

The Disk Details button gives access to the Disk Information window:



ID	State	Cap (Gb)	Temp(C°)	Model	Rev. Level	SN
0-A	Ok	279	35	FUJITSU MAW3300NC	0104	DA00P7A01WN7
0-B	Ok	279	37	FUJITSU MAW3300NC	0104	DA00P7A01WSJ
0-C	Ok	279	39	FUJITSU MAW3300NC	0104	DA00P7A01WS6
0-D	Ok	279	37	FUJITSU MAW3300NC	0104	DA00P7A01WRA
0-E	Ok	279	32	FUJITSU MAW3300NC	0104	DA00P7A01WS7
1-A	Ok	279	37	FUJITSU MAW3300NC	0104	DA00P7A01WDH
1-B	Ok	279	40	FUJITSU MAW3300NC	0104	DA00P7A01WSA
1-C	Ok	279	41	FUJITSU MAW3300NC	0104	DA00P7A01WPA
1-D	Ok	279	39	FUJITSU MAW3300NC	0104	DA00P7A01WP5
1-E	Ok	279	33	FUJITSU MAW3300NC	0104	DA00P7A01WTA
2-A	Ok	279	37	FUJITSU MAW3300NC	0104	DA00P7A01WSC
2-B	Ok	279	40	FUJITSU MAW3300NC	0104	DA00P7A01WT2
2-C	Ok	279	42	FUJITSU MAW3300NC	0104	DA00P7A01WSP

Parameter	Description
ID	Disk Identification
State	Disk Status: OK, not present, spare,...
Cap (Gb)	Disk Capacity in Gbytes
Temp (Unit defined in Settings)	Disk Internal Temperature
Model	Disk Manufacturer and model
Rev. Level	Disk Revision Level
SN	Disk Serial Number

Information can be copied (with the Ctrl C command) from the window and pasted in a text file.

HARDWARE TAB

The Hardware tab lists the available modules and boards installed in the server along with their respective version or revision number and their configuration when relevant.

Status	Storage	Hardware	Codes	Mib Browser
Name	Version			
MTPC Board	Id=0xA4			
HCTX CPU Board	Id=0xA1, Revision=0x43, Jumpers...			
COHX Base Board #0	ID=0xC2, IDE=0xd0			
COHX Base Board #1	ID=0xC2, IDE=0xd0			
CH#0 (COHX)	HW:0x0a/0x03 Feat:0x00c3			
CH#1 (COHX)	HW:0x0a/0x03 Feat:0x00c3			
CH#2 (COHX)	HW:0x0a/0x03 Feat:0x00c3			
CH#3 (COHX)	HW:0x0a/0x03 Feat:0x00c3			
ACCODEC	Id=0x65, Ide=0x0A, Ide2=0x0B			
GBE	Rev=HCTX_GBE A4 1			

Modules

Parameter	Description
Name	Server module type
Version	Server module revision and additional parameters

CODES TAB

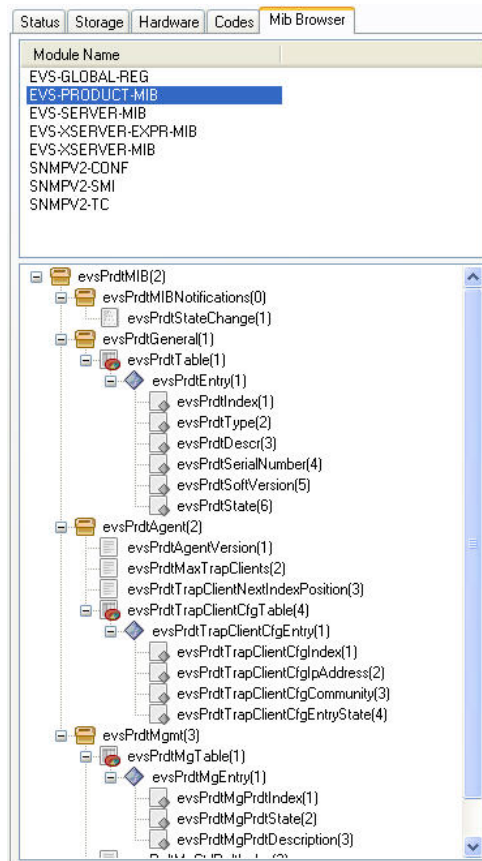
The Codes tab lists the options codes activated on the server along with their description.

Status	Storage	Hardware	Codes	Mib Browser
Number	Description			
2	AUTHORIZE_SD_CONFIGS			
3	AUTHORIZE_HD_CONFIGS			
4	AUTHORIZE_CONFIG_CHANGES			
5	CODEC_DNxHD			
6	CODEC_PRORES			
7	CODEC_LOW_RES			
101	SERVER_SPOTBOX_BASE_OPEN_CONFIG			
102	LSM_ALL_OPTIONS			
103	LSM_BASE_OPEN_CONFIG			
104	LSM_BASE_1_PLAY			
105	LSM_BASE_2_PLAY			
106	LSM_BASE_3_PLAY			
107	LSM_BASE_4_PLAY			
108	LSM_BASE_5_PLAY			
109	LSM_BASE_6_PLAY			
110	SUPER_MOTION			
111	MULTICAM_LSM_SERVER_PLST_MGMT_BASIC			
112	MULTICAM_LSM_SERVER_PLST_MGMT_ADVANCED			
113	MULTICAM_LSM_SPLIT_SCREEN			
114	MULTICAM_LSM_TELESTRATOR			
115	MULTICAM_LSM_TARGET_TRACK			
117	LSM_SERVER_SPOTBOX_SDTI_NETWORK_ADVANCED			
118	LSM_SERVER_SPOTBOX_SONY_DD35_PROTOCOLS			
119	LSM_SERVER_SPOTBOX_ODETHICS_VDCP_PROTOCOLS			
120	LSM_SERVER_SPOTBOX_AVSP_PROTOCOL_CUT_IPDP			
121	LSM_SERVER_SPOTBOX_AVSP_IPDP_PROTOCOL_FX			
122	LSM_SERVER_SPOTBOX_EDIT_REC_PROTOCOL			
123	LSM_SERVER_SPOTBOX_LINK_PROTOCOL			
124	LSM_SERVER_SPOTBOX_DB_SEARCH_FUNCTIONS			

MIB BROWSER TAB

The MIB Browser tab allows to view the MIB (Management Information Base) and gives a description of the parameters that can be polled.

This is dedicated to maintenance.

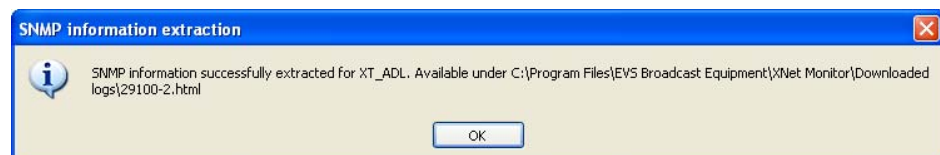


3.3.4 SNMP INFORMATION EXTRACTION

Information relative to a server can be extracted as follows:

1. Right-click on the server in the Hosts List pane.
2. Select **Extract SNMP Information** from the contextual menu.

The extraction starts and once it is done, the **SNMP Information Extraction** window displays the html file name and its storing folder and path:



3.4 SNMP ALERT MESSAGES

3.4.1 ALERT MESSAGES MANAGEMENT

The SNMP Messages pane displays the SNMP alert messages sent by the host or groups of hosts selected in the Hosts List pane. These messages are displayed until they are acknowledged by the user.

Start Date:

Monday , April 27, 2009

Filter:

Not Acknowledged

Ack alert(s)

End Date:

Monday , May 04, 2009

Host Name	Date	Alert message	IP Address
Server 2	5/4/2009 12:14:12 ...	Disk alert: state of disk Disk 0-D is Disconnected	1.1.20.22
Server 2	5/4/2009 12:14:12 ...	Analog LTC NotDetected	1.1.20.22
Server 2	4/29/2009 3:46:50 ...	Analog LTC NotDetected	1.1.20.22
Server 2	4/28/2009 11:32:28...	Status: not running	1.1.20.22
Server 2	4/27/2009 10:36:57...	Analog LTC NotDetected	1.1.20.22

ALERT MESSAGES DISPLAY

Use the calendar of the **Start Date** and **End Date** drop-down fields to restrict the displayed alerts list to the selected.

Use the **Filter** drop-down menu to select the alerts to be displayed:

- **All:** All alerts that occurred during the selected period are displayed.
- **Acknowledged:** Only alerts that have already been acknowledged are displayed.
- **Not Acknowledged:** Only alerts that do not have been acknowledged yet are displayed.

ALERT MESSAGES ACKNOWLEDGEMENT

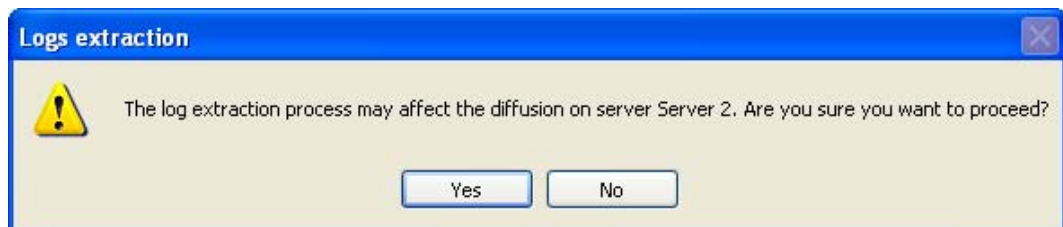
The alert acknowledgment function helps you to easily remove alert messages from the displayed list once they have been visualized and/or taken care of.

Use the **Ack Alert(s)** button to acknowledge the selected alerts. These alerts are kept in the log file but are not displayed anymore (depending on the display filter configuration).

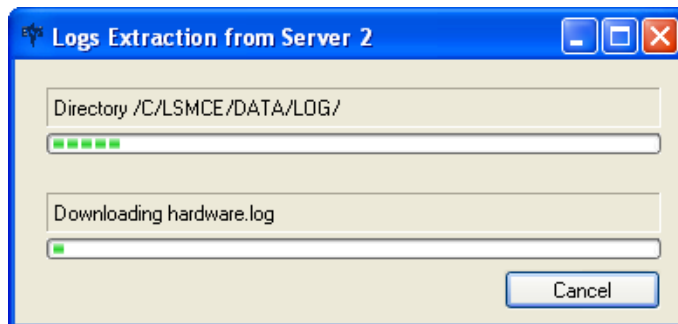
3.4.2 SERVER LOGS EXTRACTION

To remotely recover the SNMP logs stored on a server, right-click on it in the Hosts List pane and select **Extract logs** in the contextual menu.

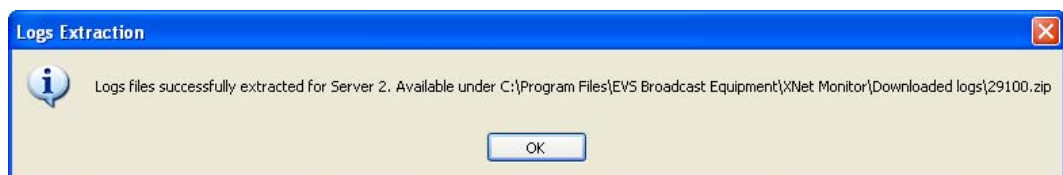
The following warning message window is displayed to warn you that the extraction process may interfere with the video diffusion from that server. Launch the extraction process again later if you cannot accept any diffusion trouble at this time.



The next window displays progress bars of the extraction and the current directory and file being downloaded.



Once the logs extraction is done, a window briefly appears about the log files compression then the **Logs Extraction** window displays the zip file name and its storing folder and path.



The different logged information (configuration, alerts...) is stored in different folders and files and packed together in a zip file. Next to the zip files is a text file (LogExtraction_servername.log) for each server that logs the extractions dates, operations, results and resulting zip file.



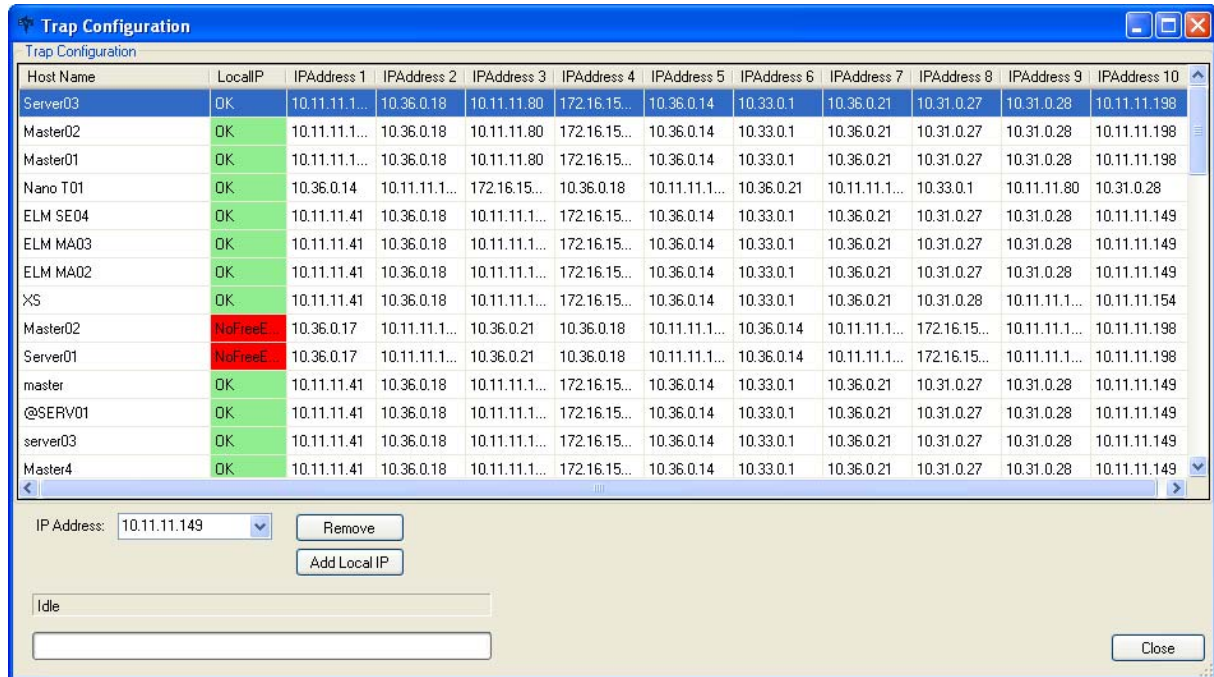
Note

At log extraction, the log file on the remote server is closed and transferred. After this operation, a new log file is created on the remote server to log the events that happen from now on.

3.4.3 SERVERS SNMP CONFIGURATION

In the **Tools** menu, the **Trap Configuration** command opens the **Trap Configuration** window as shown below.

In this window, a table is displayed with all servers and for each of these, a list of all IP addresses to which they send their SNMP trap messages. So, it is easy to see which monitoring computer will receive any trap message.



The **Remove** button allows removing the selected IP Address.

The **Add Local IP** button allows adding the current XNet Monitor IP Address on the monitored server.

The status line and progress bar at the bottom of the window display the currently executed command and its progress status.



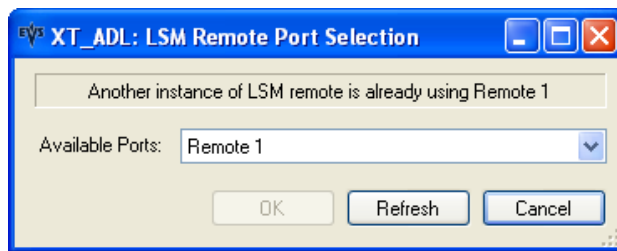
3.5 REMOTE PANEL CONTROL



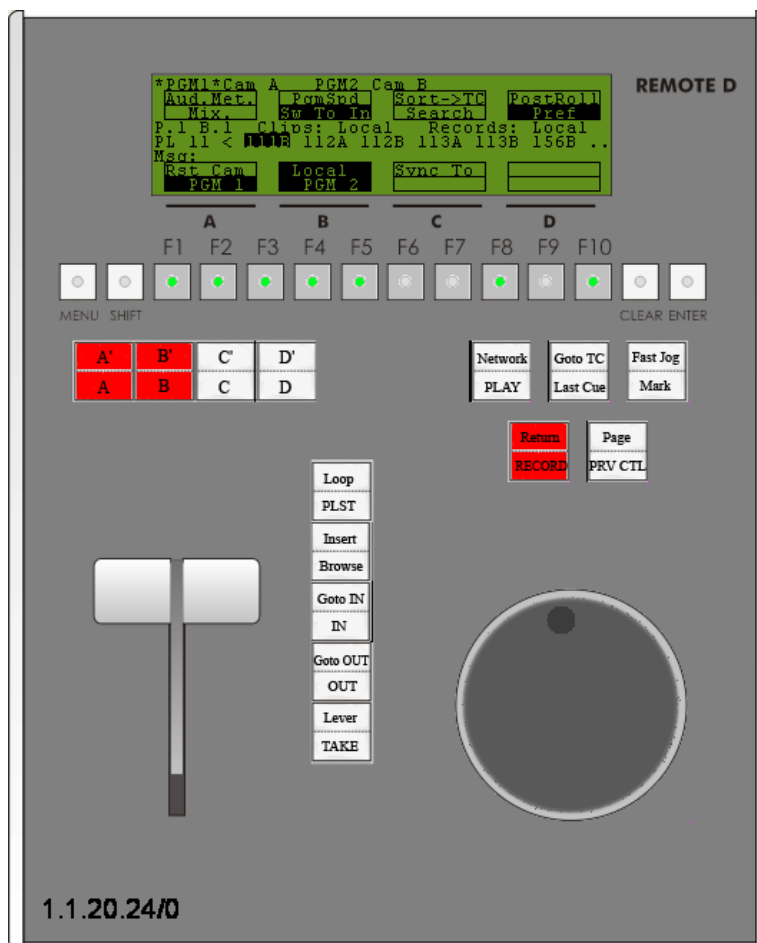
Important

This function must only be used for training purposes. It is not intended to be used for operations.

It is possible to take the control of an LSM remote device connected to a server. When you right-click on a server name, the **LSM Remote...** command first opens the following window, allowing you to select the port number linked to the physical remote device:



Pressing **OK** opens an interactive window representing the LSM remote panel and from which you can use the different commands, such as on the physical remote itself.

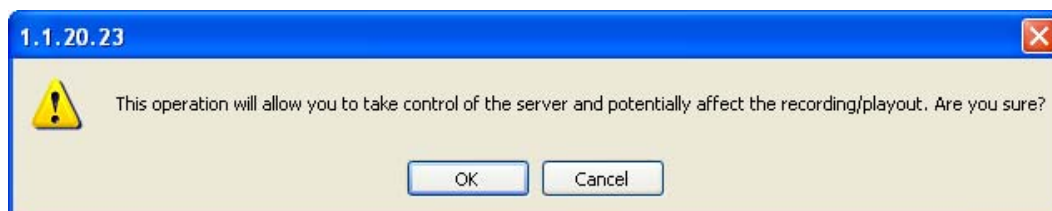


You can close this window by pressing **Escape**.

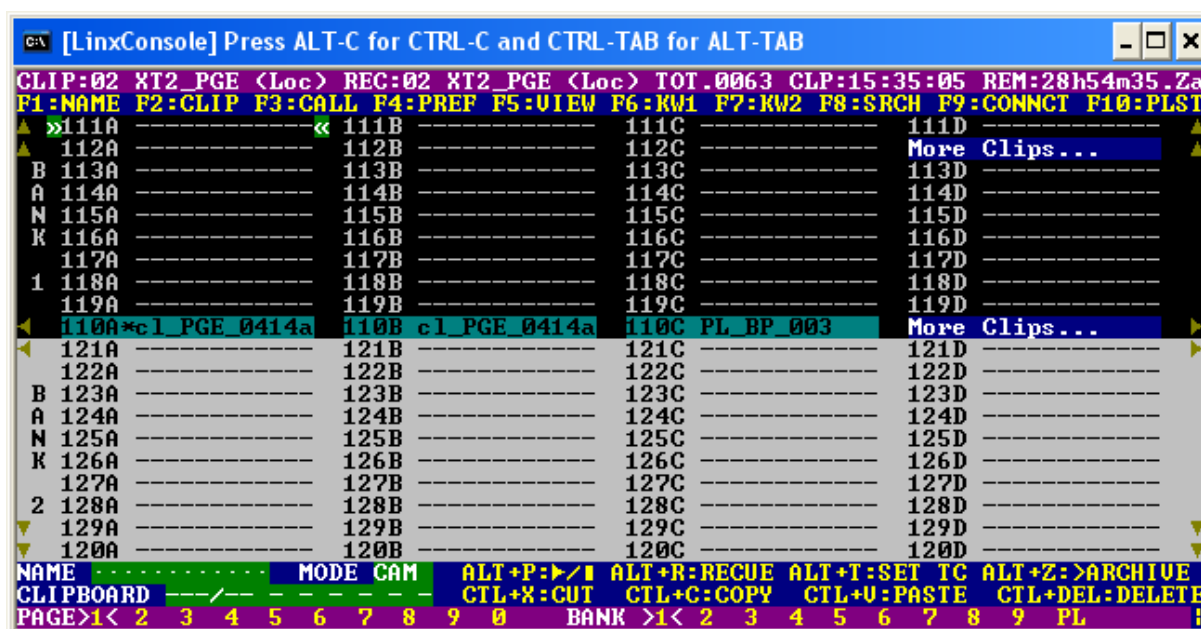


3.6 REMOTE DESKTOP CONTROL

It is possible to remotely access a server desktop. When you right-click on a server name, the **Remote Desktop...** command first opens the following window, warning you that you are going to take control of the server:



Pressing OK opens the server screen:



From this screen, you are able to navigate through Multicam and EVS screens exactly as you accessed them from a keyboard.

3.7 HOSTS LISTS MANAGEMENT

From the **File** menu, commands make it possible to manage the hosts and servers list available in the Hosts List pane. This list is saved as an xml file for future use and/or for transfer to another monitoring computer. This allows easy sharing and management synchronization of servers and hosts tree organization.

The following commands are available in the **File** menu.

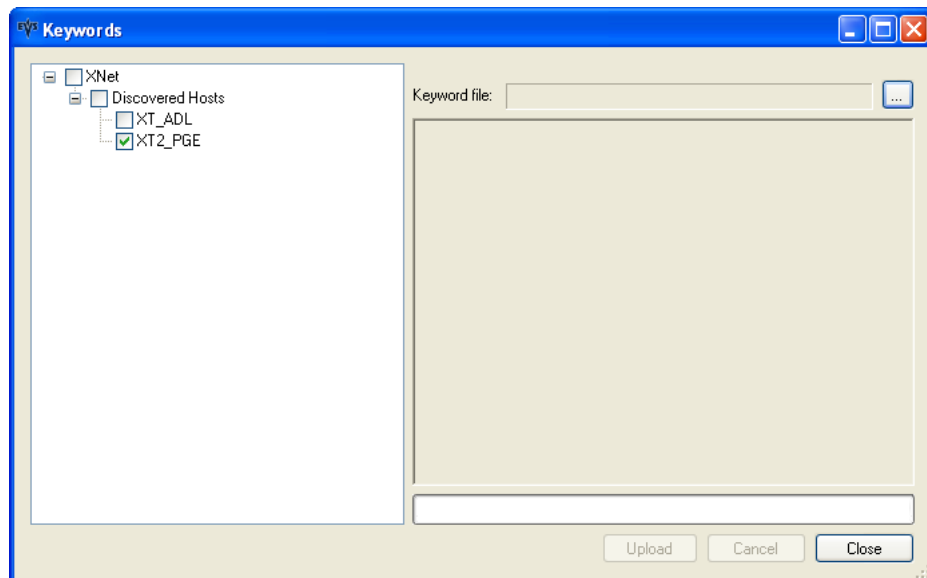
Parameter	Description
New	To create a new virtual architecture from scratch.
Open	To open an existing architecture saved as an xml file.
Save	To save the currently open architecture xml file.
Save As	To save the currently open architecture xml file as a new file.
Exit	To close and exit XNet Monitor program.



3.8 KEYWORDS DISTRIBUTION

To upload a keyword file on one or several servers, proceed as follows:

1. In the **Tools** menu, select **Server > Keyword Files**. The **Keywords** window appears.



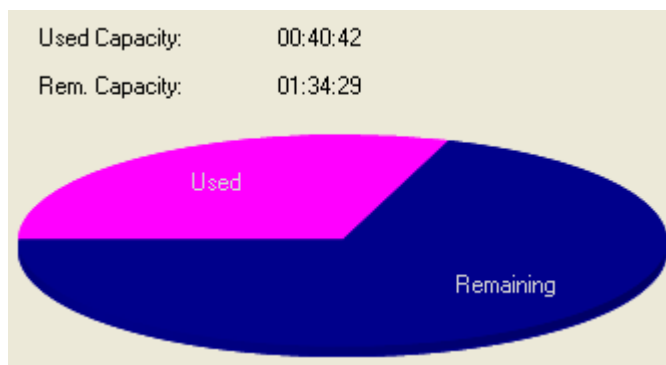
2. Select the server(s) to receive the keyword file in the left pane of the **Keywords** window.
3. In the **Keyword File** field, browse your computer to select the keyword file to upload.

4. Click on the **Upload** button to start the keyword file copy on all selected servers.

3.9 DISK USAGE

The Disk Usage pane displays a summary of the total used and remaining disk space. This total is computed for all disks available on the server or group of servers selected in the Hosts List pane.

A color pie chart helps you to immediately visualize the disk usage of your system. More precise figures are given over that pie chart, expressed as a used and remaining video time in hours, minutes and seconds.



4. Server Update and Reboot

XNet Monitor is a monitoring tool. Nevertheless it is able to remotely perform two actions on any server if configured accordingly:

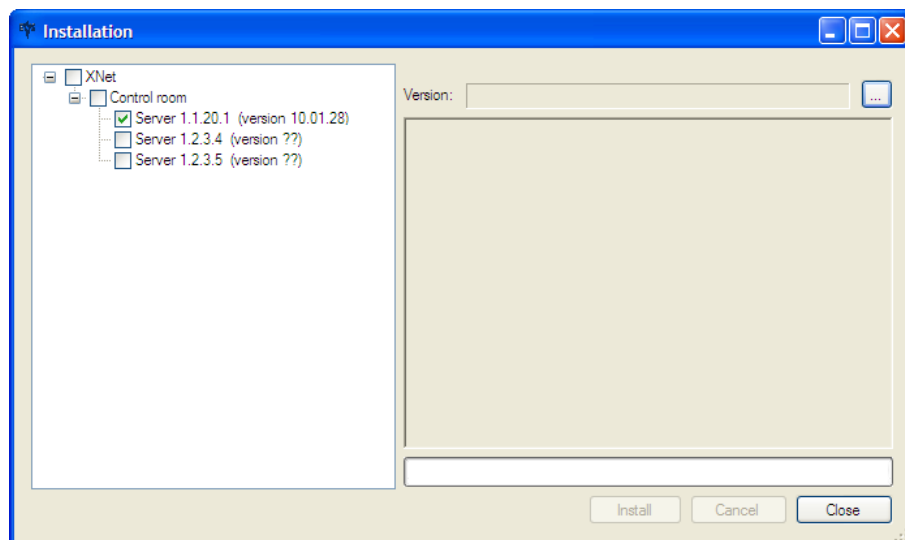
- Update the Multicam version on a server
- Reboot a server if necessary

4.1 MULTICAM UPDATE

4.1.1 NEW VERSION INSTALLATION

To remotely update Multicam on one or several servers, proceed as follows:

1. In the **Tools** menu, select **Server > Install Versions**. The **Installation** window appears.



2. Select the server(s) to update in the left pane of the **Installation** window.
As a reminder, the currently installed Multicam version is displayed next to each server.
3. In the **Version** field, browse your computer to select the new Multicam installation zip file
4. Click on the **Install** button to start the installation process on all selected servers.



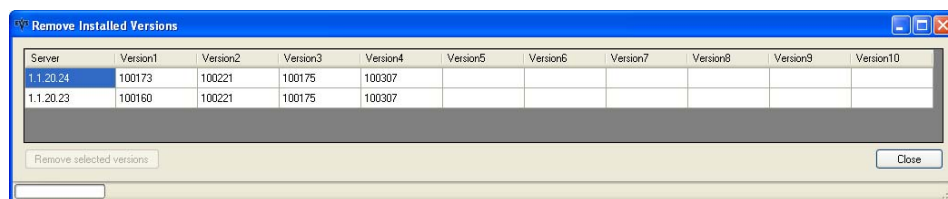
Note

The Multicam installation zip file can be generated from the makezip.bat file or from the XNet Install Zip.bat file available with all Multicam installation packages.

4.1.2 REMOVE VERSIONS

To remove previously installed Multicam versions, proceed as follows:

1. In the **Tools** menu, select **Server > Remove Installed Versions**. The **Remove Installed Versions** window appears.



2. Select the version(s) you want to remove.
3. Click the **Remove Selected Versions** button.

4.2 SERVER REBOOT

To remotely reboot a server, right-click on it in the **Hosts List** pane and select **Reboot** in the contextual menu.

The **Server Reboot** message window is displayed. You must confirm the reboot process to start it on the remote host.



Note

This command will be available only if the corresponding parameter is enabled in the **Settings** window.

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