nuuo®

The Intelligent Surveillance Solution

Crystal Titan User Manual

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1. Introduction

Crystal 2.0 is a Linux-based enterprise solution. It is designed for the management of large projects with multiple servers, or single server with high throughput megapixel recording.

Crystal 2.0 provides centralized management for unlimited devices, servers, users, with the unlimited channels of video wall display for centralized viewing(Ultimate level only), to help users manage a big system efficiently.

There are two levels of the camera channel—Ultimate and Enterprise. Ultimate level support full function of Crystal 2.0, and Enterprise level support full functions except for the video wall application.



The following is the system structure.

The whole Crystal 2.0 system contains the following components:

Component	Description
Management Server	The Management Server controls and configures the Recording Server and the Metadata Server.
Recording Server	The Recording Server controls the cameras.
Metadata Server	The Metadata Server controls third-party device such as a POS server, Access Control server, and so on.
NuClient	The software that login Management Server for Live View (instant video playback), Playback (recorded video playback) and Config (system configuration).
NuMatrix (Ultimate only)	The software that control by NuClient and display unlimited number of live viewing videos.

2. Installation

2.1 Installation Process

Step 1: Unpack the Unit

This package contains the following items:

- The unit
- Quick Start Guide
- Screws for disk drives
- Key
- Power cord
- Warranty card
- CD with Install Wizard, NuClient and Offline License Tool application, user manual, and quick start quide.

manual, and quick start guide

The electronic components within the unit can be damaged by Electrostatic Discharge (ESD). Please take precautions at all times when handling the unit or its sub-assemblies.

To configure the unit, you must install the software onto a desktop/ laptop running Windows XP-SP3 32bit, Windows 7 32/64bit, Mac OS X v10.6/10.7

Unit front/rear view (CT-4000: Tower)





Setting	Description
1	Key Lock
2	LED Indicators: HDD1-4
3	USB x2
4	LED Indicators: LAN1-2
5	LED Indicators: Power
6	Power Button
7	PSU Cooling Fan
8	Power Connector
9	VGA
10	System Cooling Fan
11	Gigabit LAN x 2
12	USB x 4
13	eSATA Connector

(CT-4000R: 4 bay rackmount)



Setting	Description
1	Key Lock
2	LED Indicators: LAN2
3	LED Indicators: LAN1
4	Power LED
5	Power Button
6	HDD Power LED
7	HDD Access LED
8	Power Connector
9	PSU Cooling Fan
10	VGA
11	USB x 4
12	Gigabit LAN x 2 (LAN2 / LAN1)
13	eSATA Connector
14	System Cooling Fan

(CT-8000R:8 bay rackmount)



1

Setting	Description
1	Key Lock
2	LED Indicators: LAN2
3	LED Indicators: LAN1
4	Power LED
5	Reset Button
6	Power Button
7	HDD Power LED
8	HDD Access LED
9	Power Supply Switch
10	COM port
11	DVI
12	USB 2.0 x 2
13	USE 3.0 x 2
14	Microphone in
15	eSATA Connector
16	VGA
17	LAN 2
18	LAN 1
19	Line-in
20	Line-out

(CT-8000RP: 8 bay rackmount with redundant power)



Setting	Description
1	Key Lock
2	Power Fail LED
3	LED Indicators: LAN2
4	LED Indicators: LAN1
5	Power LED
6	Reset Button
7	Power Button
8	HDD Power LED
9	HDD Access LED
10	Power Supply Mute Button
11	COM port
12	DVI
13	USB 2.0 x 2
14	USE 3.0 x 2
15	Microphone in
16	eSATA Connector
17	VGA
18	LAN 2
19	LAN 1
20	Line-in
21	Line-out
22	LED Indicators: PSU1
23	PSU 2

NUUO Crystal 2.0

24	LED Indicators: PSU2
25	PSU1

Step 2: Install Hard Drives

Refer to compatibility list and install HDDs. For optimal performance consideration, install disks with the same model and storage capacity. The available RAID level depends on the amount of disks installed.

1. Open the lid on the front of the unit enclosure.

2. Pull a HDD tray from the enclosure. See the front view figure.

3. Carefully lock the disks into the HDD tray with screws and 3 screws for each disk. We recommend locking the screws on the bottom of the disk, instead of the side of tray. Put the HDD tray back once you finished.

Step 3: Connect to the Network

1. Attach one end of the network cable to the RJ45 network connection. See the rear view figure.

2. Attach the other end of the network cable to your Ethernet hub or switch.



If there are multiple networks at your facility, note the network to which you connect the unit. You will need this information during the setup process. Please also enable the DHCP function within the network, as the unit will retrieve an IP address through DHCP by default.

Step 4: Connect the Power

- 1. Attach the power cord to the power source.
- 2. Connect the power cord to the back of the unit enclosure. See the rear view figure.
- 3. On the front of the unit, press the power button. See the front view figure.

It takes about a minute for the unit to fully power up. Once it is powered up, the Power Status LED turns blue. See the front view figure.

Step 5: Install the Software

- 1. Insert the CD into your CDROM.
- 2. Double-click **Setup.exe** to begin installation.

3. Follow the instruction of **Setup.exe**, and click the **Finish** button to close the installer.

Step 6: Set up the Unit

The software Installation Wizard performs the setup procedures on the unit.

Once a **Crystal Titan**, the hardware for the **Management Server**, is set up and connects to the network, proceed to set up the management service. Launch the **Install Wizard** to set up the management service for your surveillance network.

To set up the management service:

- 1. Go to Start and select NUUO Crystal Series
- 2. Run the executable file InstallationWizard.



The NUUO Crystal Installation Wizard opens.



- 3. Select a language and click the \Rightarrow button to proceed.
- 4. A **Search** page opens.



5. On the **Search** page, click the **Search** button to search for any **Crystal Titan** within the network.



(Click the bottom-left question mark icon **9** to see the tips.)

Any **Crystal Titan** discovered within the network will be displayed on the **Search** page, with the information about the MAC address, IP address, port, model and the **Crystal Titan**'s server name.



6. Double click the discovered Crystal Titan.

A Login dialog opens.



The **Network** page opens.

7. Enter the username and the password. Click the OK button to submit. Then click the
 → button to proceed.

Installation Wizar	d - CT-4000 (192.1	68.1.59)		_	_ ×
nuuc	Crysta	al	Inst	allation \	Wizard
	< > €				
Network					
Server name:	CT-4000				
Web port:	80				
Network servic	:e:				
Obtain netv	vork setting from e	xternal DHCP serv	er.		
Manually co	onfigure network s	etting.			
IP addres	ss: 192.168.1.59				
Subnet ma	sk: 255.255.252.0)			
Default gatew	ay: 192.168.4.1				
Primary DN	IS: 192.168.4.1				
Secondary DN	IS:				
0					Cancel

(Click the bottom-left question mark icon **9** to see the tips.)

8. Make your network settings. Then click the 🗭 button to proceed.

Installation Wizard - C1-4000 (192.168.1.59)	_ ×
NUUO ° Crystal	Installation Wizard
Q 🕀 🗎 🖉	
Network	
Server name: CT-4000	
Web port: 80	
Network service:	
Obtain network setting from external DHCP server.	
Manually configure network setting.	
IP address: 192.168.1.59	
Subnet mask: 255.255.252.0	
Default gateway: 192.168.4.1	
Primary DNS: 192.168.4.1	
Secondary DNS:	
9	

(Click the bottom-left question mark icon 📀 to see the tips.)

1	10	
	1=	For web default Port is 80(TCP).
	12	\mathbf{P}
	12	
1		

A **Modify Password*** page then opens.

Installation Wizard - CT-4000 (192.168.4	.59)	_ ×
NUUO ° Crystal	Inst	tallation Wizard
Q ()		
Modify Password		
Modify Titan hardware password		
Username:	admin	
Original password:		
New hardware password:		
Hardware password confirmation:		
0		
		Cancel

(Click the bottom-left question mark icon **9** to see the tips.)

9. Modify the password to access the **Crystal Titan** hardware. Then click the **➡** button to proceed.

Installation Wizard - CT-4000 (192.168.	1.59) <u> </u>
NUUO ° Crystal	Installation Wizard
Q ()	
Modify Password*	
Modify Titan hardware password	
Username:	admin
Original password:	
New hardware password:	
Hardware password confirmation:	
0	



Crystal Titan hardware password is for Crystal Titan hardware only.

A Management Server page opens.

Installation Wizard - CT-4000 (192.168.1.59)	_ ×
NUUO ° Crystal	Installation Wizard
Q (1)	
Management Server	
Enable Management Server Login remote Management Server	
Management Server IP/ domain name: 127.0.0.1	
Management Server command port: 5250	
Management Server username: admin	
Management Server password: 🚥	
•	Cancel

10. On the Management Server page, enable the management service on the previously discovered Crystal Titan or login to another remote Management Server. Then click the ➡ button to proceed.

Installation Wizard - CT-4000 (192.168.1.59)	_ ×
NUUO ° Crystal	Installation Wizard
Q 🕀 🗎 🗎	
Management Server	
Enable Management Server Login remote Management Server	
Management Server IP/ domain name: 127.0.0.1	
Management Server command port: 5250	
Management Server username: admin	
Management Server password: ••••	
ด	

For **Management Server** default Port is 5250(TCP) and the server port should be larger than 1000. Also the command port cannot be the same.

Installation Wizard - CT-4000 (192.168.1.59)	_ ×
NUUO ° Crystal	Installation Wizard
Q 🕀 🗎	
Management Server*	
 Enable Management Server Login remote Management Server 	
Management Server IP/ domain name: 192.168.1.10	
Management Server command port: 5250	
Management Server username: admin	
Management Server password: •••••	
ด	
	Cancel

(Click the bottom-left question mark icon ② to see the tips.)

If you enable Management Server on the previously discovered **Crystal Titan**, the **Crystal Titan** will assign as Management Server. If enable login remote Management Server, you can enter Management Server IP, port, username and password to assign the previously discovered **Crystal Titan** as recording server or Metadata Server to Management Server.

The Metadata Server/Recording Server Service Setting* page opens.

11. Enable/disable the recording service or metadata service on the Crystal Titan.
 Then click the
 → button to proceed.



(Click the bottom-left question mark icon **2** to see the tips.)

For **Recording Server** default Port is 5251(TCP) and **Metadata Server** default Port is 5252(TCP). The server port should be larger than 1000. Also the command port cannot be the same.

A Date Time page opens.

		oo (192.168.1.59) r ystal)		Insta	llatio	on Wiz	_ zar
	Q					è è	\odot	
teTime*								
	т	Time Zone: (GM	T+08:00) Bei	jing, Hong	Kong, Kuala	a Lumpur,	Perth, Singap	ore, -
🔽 Synchro	nize with N	ITP server: time	.windows.co	m			Upd	late
		Date/Time: 8/13	/2013		. 8:2			
Daylig	ht saving ti	ime adjustment:						
 2								
9						Finish	Can	cel -

(Click the bottom-left question mark icon **?** to see the tips.)

12. Select **Synchronize with NTP server** to synchronize date/time with the Internet time server, or deselect **Synchronize with NTP server** to enables manual date/time settings.

nstallation Wizard - CT-				nsta	llation V	_ × Vizard
Q		1				
DateTime*						
	Time Zone: (GMT+08:0	0) Beijir	ng, Hong I	Kong, Kuala	a Lumpur, Perth, Si	ngapore, 🗸
Synchronize wit	h NTP server: time.windo	ws.com				Update
	Date/Time: 8/13/2013			8:2	8:56 AM	* *
🔲 Daylight savin	g time adjustment: +2					
0						
Ŭ					Finish	Cancel
		_				

(Click the bottom-left question mark icon 2 to see the tips.)

[] To connect to the NTP server, access the Internet by LAN1.

For NTP Server default Port is 123(UDP).

Select **Daylight saving time adjustment** to set daylight saving time zone, start time and end time.



13. Click the **Finish** button to finish the setup of management service.

2.2 LED Status Definitions

CT-4000

Function	LED Status
Power Status	Power-on: bluePower-off: dark
HDD Status (top)	Power-on: bluePower-off: dark
HDD Activity Status (bottom)	 Healthy: blue with blinking No disk: dark
Ethernet Status	Linking: blue

NUUO Crystal 2.0

•	Accessing: blue with blinking
•	No linking: dark

CT-4000R

Function	LED Status
Power Status	Power-on: blue
	Power-off: dark
HDD Status (top)	Power-on: blue
	Power-off: dark
HDD Activity Status (bottom)	Healthy: blue with blinking
	No disk: dark
Ethernet Status	Linking: blue
	Accessing: blue with blinking
	No linking: dark

CT-8000R

Function	LED Status	Remark
Power Status (front)	Power-on: bluePower-off: dark	
HDD Status (front; HDD Tray)	 Power-on: blue Power-off: dark Access: blink (Green) 	Two LEDs on HDD tray LED1: Power indicator (Blue/ always turn on) LED2: Access indicator (Green/blink)
Ethernet Status x2 (front)	Connected: blueAccessing: blue with blinking	Two LED, one for LAN1 status and the other one for LAN2 status
Ethernet Activity x2 (rear)	Link Rate indicator (Left side)SettingDescriptionGreen=1000MbpsOrange=100MbpsDark=10Mbps or no link	Two LEDs for each Ethernet port

Link status indicator(Right side)	
1) Accessing: Green with blinking	

CT-8000RP

Function	LED Status		Remark
Power Status	Power-on:	blue	
(front)	Power-off:	dark	
Power Fail	Power-fail:	red	
	Normal: da	ark	
HDD Status	Power-on:	blue	Two LEDs on HDD tray
(front; HDD Tray)	Power-off:	dark	LED1: Power indicator (Blue/
	Access: bli	nk (Green)	always turn on)
			LED2: Access indicator
			(Green/blink)
Ethernet Status x2	Connected	: blue	Two LED, one for LAN1 status and
(front)	Accessing:	blue with blinking	the other one for LAN2 status
Ethernet Activity x2	Link Rate in	ndicator (Left side)	Two LEDs for each Ethernet port
(rear)	Setting	Description	
	Green	=1000Mbps	
	Orange	=100Mbps	
	Dark	=10Mbps or no link	
	 Link status indicator(Right side) 2) Accessing: Green with blinking 		

3. Web Settings

The **web settings** enable users to set up **web server** or **Management Server** through the web-based interface.

3.1Login

1. Open the NUUO Crystal Network Video Recorder Login page.



- Select a language and select the login type.
 Web server will lead to Crystal Titan hardware setting and Management Server will lead to Management Server web setting.
- 3. Enter the username and password.



5. The web settings open.

3.2 Web Server

00(R)	RAID Manageme	nt		
File System	RAID Status Modify	Delete Format		
Management				
Initiator	RAID Status			
Setup	List	Status		
	Volumes	RAID Name	VOLUME1	
	- VOLUME1	RAID Level	RAID1	
	Disk 1	RAID Status	Functional	
	Disk 2	Total Capacity	931.51 GB (953868 MB)	
		Free Capacity	N/A	
		Used Capacity	N/A	
		Usage		
		Update Time	2011/5/28 12:08:35 AM	
		Total Devices	2	
		Active Devices	2	
		Failed Devices	0	
		Spare Devices	0	
		Format Progress		
		Recovery Progress		2%

The features settings are: <u>RAID & File System</u>, <u>Network Setup</u>, <u>Management</u> and <u>System</u>, which will be explicated in the following sections.

Username and password is Crystal Titan hardware's username and password.

3.2.1 RAID & File System

Use the **RAID & File System** menu to configure the system's RAID features and file settings.

To access the RAID & File System menu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the **RAID & File System**.

The **RAID & File System** menu unfolds the **RAID Management** and **iSCSI Initiator** submenus.

		submenus.	i inchu uniolus i	0	
Λυυο					
T-4000(R)	RAID Managem	ent			
RAID & File System	RAID Status Modify	Create Delete	Format		
RAID Management					
iSCSI Initiator	RAID Status				
	List	Status			
	- Volumes		RAID Name		
	- VOLUME1		RAID Level		
	Disk 1		RAID Status	Functional	
	Disk 2		Total Capacity	931.51 GB (953868 MB)	
			Free Capacity		
			Used Capacity	N/A	
			Usage		
			Update Time	2011/5/28 12:08:35 AM	
			Total Devices	2	
			Active Devices	2	
			Failed Devices	0	
			Spare Devices	0	
			Format Progress		
			Recovery Progress		2%

The features submenus are: <u>RAID Management</u> and <u>iSCSI Initiator</u>, which will be explicated in the following sections.

3.2.1.1 RAID Management

As the name suggest, the **RAID Management** tabbed page manages the system's RAID (Redundant Array of Independent Disks), a storage that combines multiple disk

drives into a logical unit.

To access the RAID Management submenu:

- 1. Login to NUUO Crystal Network Video Recorder web page as described in Login.
- 2. The web settings open.
- 3. From the Config Catalog, click the RAID & File System | RAID Management.

The RAID Management submenu displays in the Configuration Pane.

		The RAID Manage menu unfolds the RAID		•
າບບ໐™				
-4000(R)	RAID Managemer	nt		
AID & File System RAID Management iSCSI Initiator	RAID Status Modify	Delete Format		
	List	Status		
	Volumes	RAID Name	VOLUME1	
	- VOLUME1	RAID Level	RAID1	
	Disk 1	RAID Status	Functional	
	Disk 2	Total Capacity	931.51 GB (953868 MB)	
	Disk2	Free Capacity	N/A	
		Used Capacity	N/A	
		Usage		
		Update Time	2011/5/28 12:08:35 AM	
		Total Devices	2	
		Active Devices	2	
		Failed Devices	0	
		Spare Devices	0	
		Format Progress		
		Recovery Progress		2%

The **RAID Management** menu features five tabbed pages, <u>RAID Status</u>, <u>Modify</u>, <u>Create</u>, <u>Delete</u> and <u>Format</u>, which will be explicated in the following sections.

3.2.1.1.1RAID Status

The **Status** tabbed page delivers the status of RAID "volume", which means one or more disk drives working together as a logical drive. Video recording requires a volume to be created first.

To access the **Status** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the RAID & File System | RAID Management | RAID Status tab.

The **RAID Status** tabbed page opens and shows the created volume(s) in the system. **RAID Status** tabbed page

Λυυο™				
	RAID Manageme	at a		
CT-4000(R) · RAID & File System				
RAID Management	RAID Status Modify	Delete Format		
	🕄 RAID Status			
 iSCSI Initiator 	List	Status		
			VOLUME1	
	- Volumes	RAID Name RAID Level	RAID1	_
	Disk 1	RAID Level	Functional	
	Disk 1	Total Capacity	931.51 GB (953868 MB)	
	Im DISK ∠	Free Capacity		
		Used Capacity	N/A	
		Usage		
		Update Time	2011/5/28 12:08:35 AM	
		Total Devices	2	
		Active Devices	2	
		Failed Devices	0	
		Spare Devices	0	
		Format Progress		
		Recovery Progress		2%

Ωυυο™			
CT-4000(R)	RAID Management RAID Status	Delete Format	
iSCSI Initiator Network Setup	List	Status	
> Management	Volumes	Vendor Model	ATA ST1000DM003-9YN1
> System		Capacity Firmware Version	931 GB CC4B
Firmware Version: 2.0.3 Free Capacity: 121 GB	VOLUME2	Serial No. Smart Support	Z1D1ZCH7 Yes
		Smart Enable RAID Status	Enable

The RAID status info delivered is:

Group	Description
Disk	 Delivers the present volume(s) in the system. Click Volume # or Disk# to switches the status info between the present volume(s) and disk(s). If there hasn't been any volume created yet, "No Volume" is displayed here. The status info delivered for a present disk is:

	Info	Description		
	Vendor	Delivers the manufacturer of the disk.		
	Model	Delivers the model number of the disk.		
	Capacity	Delivers the total capacity of the disk.		
	Firmware	Delivers the firmware version of the disk.		
	Serial No.	Delivers the serial number of the disk.		
	Smart Support	Delivers the smart support of the disk.		
	Smart Enabled	Delivers the disk's support of S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology), which enables a hard disk drive to detect and report on various indicators of reliability, in order to anticipate failures.		
	RAID Status	Delivers the status of the RAID that the disk belongs to.		
	Shows the status o	f the selected volume:		
	Info	Description		
	RAID Name	Delivers the name of the volume, which is auto-assigned when the volume is created.		
	RAID Level	 Delivers the RAID level, which is defined when the volume is created. The selectable levels depend on the number of drives present in the system. See <u>Create</u> to know how to define the RAID level. 		
		Delivers the following statuses of the volume:		
		Message Description		
		Functional The volume is normally operating.		
	RAID Status	Critical There are some problems with the volume, but video recording is normal.		
Volume		Offline The volume cannot be found. Hence video recording is stopped and the storage cannot be accessed.		
		File system errorVolume is found but isn't mounted so video recording is stopped and storage cannot be accessed.		
	Free Capacity	Delivers the free space on the volume.		
	Used Capacity	Delivers the used space on the volume.		
	Usage	Delivers the percentage of the volume's usage.		
	Update Time	Delivers the time when the volume is created /updated.		
	Total Devices	Delivers the total number of the disk(s) covered by the volume and also the number of the disk(s) that is active, failed or spare.		
	Active Devices	Delivers the number of the active disk(s) covered by the volume at the moment.		
	Failed Devices	Delivers the number of the failed disk(s) covered by the		

	volume at the moment.
Spare Devices	Delivers the number of the spare disk(s) covered by the volume at the moment.
Format Progress	Delivers the formatting progress if the volume is being formatted at the moment.
Recovery Progress	Delivers the recovery progress if the volume is being recovered at the moment.

3.2.1.1.1.1Create

It relies on the **Create** tabbed page to create one or more volumes in the system.

To access the **Create** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the RAID & File System | RAID Management | Create tab.

The **Create** tabbed page opens and shows the created volume(s) in the system.

Г	Create tabbed page
RAID Managemert	
RAID Status Create	
🕄 Create RAID	
RAID Level	ORAID 0 ORAID 1 RAID 5 RAID 10
Assign Disk(s)	Disk 1 Disk 2 >> <
Create Reset	

On the Create tabbed page, the featured settings are:

Setting		Description	Default
RAID Level		Defines the RAID level.	It depends on the number of drives present in the system
Assigned Disk(s)	Disk #	Selects a disk to assign it to the volume to be created.	Deselected

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Create button	Creates the configured volume.	
Reset button	Reset the configured volume.	

- 3. Click **Create** button and a confirmation dialog pops up.
- 4. Check the Yes, I want to create volume with those disk(s) box, and click the Yes, create it button.

Jse those d	isk(s):		
Disk Name	Model	Capacity	1
Disk 1	Hitachi HDS72301	1397 GB	
Disk 2	WDC WD1002FAEX-0	931 GB	

5. Finish the setup of Create.





If you choose Express Mode when using the Installation Wizard , the disk(s) will be
set to RAID 1 (2 bay) or RAID 5 (4 bay) automatically unless the number of disks is not
enough for this RAID level.

3.2.1.1.1.2 Modify

It relies on the **Modify** tabbed page to replace a broken hard drive with a new one, instead of modifying the RAID level.

In the case of "Critical" RAID status, a warning message will notice that one of the volume's disks may be damaged. Although the video recording won't be impacted, an immediate replacement is recommended to protect the volume from data loss.

To access the **Modify** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

Г

 From the Config Catalog, click the RAID & File System | RAID Management | Modify tab.

The **Modify** tabbed page opens and shows the created volume(s) in the system.

Modify tabbed page

	Create [Delete Format		
RAID List				
Volume	RAID Le	evel RAID Capa	acity RAID St	tatus Details
VOLUME1	RAID1	931.51 GB	Functional	Details
Disk 3	ST3500514	INS	465 GB	Details
Disk 3 Modify Volume	ST3500514	INS	465 GB	Details
	ST3500514 RAID Name	INS	465 GB	Details
		INS	465 GB	Details
	RAID Name RAID Level Capacity	INS	465 GB	Details
	RAID Name RAID Level		465 GB	Details
	RAID Name RAID Level Capacity	INS	465 GB	Details

- 1. Modify a volume:
- (1) Select the damaged disk to remove.
- (2) Click **Remove** button to remove the selected disk.
- (3) After the system remove the disk successfully, replace it with a new disk, and back to the **Modify** tabbed page to add this new free disk.

This function isn't applicable to RAID 0, which has no data protection mechanism by nature.
This function is recommended for any unexpected disk damage. Use this function to safely unplug the running HDD.

3.2.1.1.1.3 Delete

It relies on the **Delete** tabbed page to delete one or more volumes.

To access the **Delete** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

 From the Config Catalog, click the RAID & File System | RAID Management | Delete tab.

The **Delete** tabbed page opens and shows the created volume(s) in the system.

				The Delete 1	tabbed page	
Λυυο™						
CT-4000(R)	RAID M	anagement				
✓ RAID & File System	RAID Status		Delete Form			
RAID Management						
SCSI Initiator	🕲 RAID I	ist				
> Network Setup		Volume	RAID Level	RAID Capacity	RAID Status	Details
> Management	0	VOLUME1	RAID0	931.51 GB	Functional	Details
> System	0	VOLUME2	RAID0	298.08 GB	Functional	Details
Firmware Version: 2.0.3 Free Capacity: 121 GB	Delete	Reset				

3. Delete a volume:

- (1) Select a volume.
- (2) Click the **Delete** button to delete the selected volume.

OR

Click the **Reset** button to clear the selection.

3.2.1.1.1.4 Format

It relies on the **Format** tabbed page to format the volumes functioning in the system.

To access the **Format** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

 From the Config Catalog, click the RAID & File System | RAID Management | Format tab.

The **Format** tabbed page opens and shows the created volume(s) in the system.

			Г	The Fo	ormat tabbe	d page
Λυυο™						
CT-4000(R)	RAID M	lanagement	Delete Form	nat		
iSCSI Initiator			DAID Lough	DAID Occording	DAID Otabus	Details
> Network Setup > Management	0	Volume VOLUME1	RAID Level RAID0	RAID Capacity 931.51 GB	RAID Status Functional	Details Details
	0	VOLUME2	RAID0	298.08 GB	Functional	Details
	Format	Reset				

- 1. Format a volume:
 - (1) Select a volume.
 - (2) Click the Format button,

The formatting starts and progresses.

3.2.1.2 iSCSI Initiator

It relies on the **iSCSI Initiator** tabbed page to create an external storage on iSCSI, which means "Internet Small Computer System Interface", an IP-based protocol for transmitting data and linking data storage facilities.

To access the **iSCSI Initiator** submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the **RAID & File System** | **iSCSI Initiator**.

The **iSCSI Initiator** submenu displays in the Configuration Pane.

			The iSCSI Ini	tiator sub	menu
Λυυο™					
CT-4000(R) V RAID & File System RAID Management	iSCSI Initiator				
iSCSI Initiator	Target Portals				1
> Network Setup	Address				
> Management	Port 32	60			
> System	Discover				
Firmware Version: 2.0.3	Address	Port	Delete		
Free Capacity: 121 GB	there are no settings y	et			
	Targets				
		Name	Status Operation	Delete	
	🐫 There are no settings y	et			

- 3. Create an external storage on iSCSI.
- 4. Fill in the IP address and the port number (default 3260) for iSCSI
- 5. Click the **Discover** button.

The discovered iSCSI will show.

6. Log on each disk on Target. If you have set password on iSCSI, choose CHAP to log on. If not, choose "None".

Log on to Targe	et	
	le: iqn.2009- mise:ns4600.disk3	
Authentica	tion:	
None		
Q CHAP		
Username:		
Password:		
		Log On Cancel

7. Open the **RAID Status** tabbed page as described in <u>RAID Status</u>, the iSCSI disk will show under the **Free Disks**.

RAID Management	
RAID Status Hodify Create	Delete Format
RAID Status	
List	Status
Volumes	Vendor IET
VOLUME2	Model VIRTUAL-DISK
- VOLUME1	Capacity 365 GB
Disk 1	Firmware Version 0
- Free Disks	Serial No. WD-WCAT13225784
Disk 7 (ISCSI)	Smart Support Yes
	Smart Enable Enable
iDisk 8 (iSCSI)	

8. Creates a volume for it as described in <u>Create</u>. You can only create a volume with purely iSCSI disk.

|--|

We suggest that you use more than one HD to create one volume. DO NOT use only one HD to divide to more than 2 volumes.

If you log off the disk that has been created as a RAID, the current recording file may be destroyed.
3.2.2 Network Setup

It relies on the **Network Setup** menu to configure the systems' networking so the system can connect and communicate with associated devices within the network.

To access the Network Setup menu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the **Network Setup**.

The **Network Setup** menu unfolds the **Network Setup** and **Network Service** submenus.

	and Network Servi	ce submenus.
Λυυο™		
CT-4000 (R)	Network Setup	
> RAID & File System	Information Setup DDNS Setup	
 Network Setup Network Setup 	Common Information	
Network Service	Server Name CT-4000	
> Management	Ethernet Adapter 1 Information	
> System	IP Address 192.168.5.	38
Firmware Version: 2.0.3	Subnet Mask 255.255.25	2.0
Free Capacity: 121 GB	Default Gateway IP Address 192.168.4.	
The capacity, 121 ob	Primary DNS 192.168.4.	
	Secondary DNS	
	Ethernet Adapter 2 Information	
	IP Address 192.168.1.	9
	Subnet Mask 255.255.25	2.0
	Default Gateway IP Address 192.168.4.	
	Primary DNS 192.168.4.	
	Secondary DNS	

The Network Setup menu unfolds the Network Setup and Network Service submenus.

The features submenus are <u>Network Setup</u> and <u>Network Service</u>, which will be explicated in the following sections.

3.2.2.1 Network Setup

The **Network Setup** submenu features the network settings including IP address, subnet mask, default gateway and primary/secondary DNS.

To access the RAID Management submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the **Network Setup** | **Network Setup**.

The **Network Setup** submenu displays in the Configuration Pane.

	The Network Setup submenu
Λυυο™	
CT-4000(R)	Network Setup
 RAID & File System Network Setup 	Information Setup DDNS Setup
Network Setup	Common Information
Network Service	Server Name CT-4000
	🛞 Ethernet Adapter 1 Information
	IP Address 192.168.5.58
Firmware Version: 2.0.3	Subnet Mask 255.255.252.0
Free Capacity: 121 GB	Default Gateway IP Address 192.168.4.1
	Primary DNS 192.168.4.1
	Secondary DNS
	Ethernet Adapter 2 Information
	IP Address 192.168.1.59
	Subnet Mask 255.255.252.0
	Default Gateway IP Address 192.168.4.1
	Primary DNS 192.168.4.1
	Secondary DNS

The **Network Setup** menu features three tabbed pages, <u>Information</u>, <u>Setup</u> and <u>DDNS Setup</u>, which will be explicated in the following sections.

3.2.2.1.1 Information

The **Information** tabbed page allows users to view the system's Ethernet networking settings.

To access the Information tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

 From the Config Catalog, click the Network Setup | Network Setup | Information tab.

The **Information** tabbed page opens and shows the network configuration of the system's LAN ports.

CT-4000(R) Ne ¹ work Setup	
RAID & File System Information Setup DDNS Setup	up
Network Service Management Server 1 Informat	ion
Firmware Version: 2.0.3 Subnet Mask 2 Free Capacity: 121 GB Default Gateway IP Address 1	92.168.5.58 555.252.0 92.168.4.1 92.168.4.1
Ethernet Adapter 2 Informat IP Address 1 Subnet Mask 2 Default Gateway IP Address 1	ion 192.168.1.59 255.255.252.0 192.168.4.1 192.168.4.1

On the Information tabbed page, the info delivered is:

Group	Item	Description	
Connection Information	Server Name	Delivers the hardware's server name.	
	IP Address	Delivers the IP address assigned to this adapter.	
Ethernet Adapter 1 / 2 Information	Subnet Mask	Delivers the subnet mask assigned to the IP address used on the adapter.	
	Default Gateway IP	Delivers the IP address assigned to the adapter as gateway.	

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Address	
Primary DNS	Delivers the IP address assigned to the adapter as the primary DNS (Domain Name System).
Secondary DNS	Delivers the IP address assigned to the adapter as the secondary DNS (Domain Name System).

	To access the settings, see <u>Setup</u> tabbed page.
Q	When an adapter isn't in use, the network information isn't available.
Q	For web default Port is 80(TCP).

3.2.2.1.2 Setup

It relies on the Setup tabbed page to configure the system's networking.

Г

To access the **Setup** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the **Network Setup** | **Network Setup** | **Setup** tab.

The **Setup** tabbed page opens and shows the system's Ethernet adapters in use and the settings thereof.

Λυυο™		
CT-4000(R) RAID & File System Network Setup Network Setup	Network Se up Information Setup DDNS Setu	ip
Network Service		CT-4000
	Ethernet Adapter 1 Setting	
Firmware Version: 2.0.3 Free Capacity: 121 GB	IP Address	Obtain an IP address automatically
		192.168.4.1
	Primary DNS	192.168.4.1
	Secondary DNS	
	Ethernet Adapter 2 Setting	
	Internet Protocol	Obtain an IP address automatically Specify an IP address
	IP Address	192.168.1.59
	Subnet Mask 2	255.255.252.0
	Default Gateway IP Address	192.168.4.1
	Primary DNS	192.168.4.1
	Secondary DNS	
	OK Cancel	

The Setup tabbed page

The featured settings on the **Setup** tabbed page are:

Group	Setting	Description	Default
Common Setting	Server Name	Sets the hardware's server name.	
Ethernet	Internet	Sets whether to automatically obtain an IP address	

Adapter 1 / 2 Setting	Protocol	(DHCP) or manually specify one (static) for the adapter.	
	IP Address	Assigns an IP address for the adapter. This setting is only available when the Internet Protocol is set to Specify an IP address.	192.168.1.100
	Subnet Mask	 Assigns the subnet mask for the adapter's IP address. This setting is only available when the Internet Protocol is set to Specify an IP address. 	255.255.255.0
	Default Gateway	 Assigns the IP address for adapter's the gateway. This setting is only available when the Internet Protocol is set to Specify an IP address. 	192.168.1.1
	Primary DNS	 Assigns the IP address for the primary DNS (Domain Naming System). This setting is only available when the Internet Protocol is set to Specify an IP address. 	192.168.1.1
	Secondary DNS	 Assigns the IP address for the secondary DNS (Domain Naming System). This setting is only available when the Internet Protocol is set to Specify an IP address. 	
OK button		Applies the change(s)	
Cancel button		Recovers the defaults.	

There are two Ethernet adapters per **Crystal Titan** unit. We recommend that you use them under the scenario of two subnets, one for the cameras/devices, and the other for the remote access. If you deploy two Ethernet adapters within the same subnet, it's likely to cause parts of the cameras disconnected as either one of the adapters disconnected.

3.2.2.1.3 DDNS Setup

The **DDNS Setup** tabbed page enables/disables DDNS, which allows the system to use dynamic IP address. This page also sets the DDNS profile.

To access the **DDNS Setup** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

 From the Config Catalog, click the Network Setup | Network Setup | DDNS Setup tab.

The **DDNS Setup** tabbed page opens.

		The DDNS Setup tabbed page
Λυυο™		
CT-4000(R)	Network Setu	p
> RAID & File System	Information Setup	DDNS Setup
Network Setup Network Setup	Dynamic DNS Se	etting
» Network Service	DDNS	Enable
> Management	Ethernet Interface	LAN1 (192.168.5.58) V
> System	Provider	DynDns 🗸
Firmware Version: 2.0.3	Username	
Free Capacity: 121 GB	Password	
	Host name	
	Update Period	16 V minutes
	Save Rese	

The featured settings on the **DDNS Setup** tabbed page are:

Setting	Description	Default
DDNS	Enables/disables DDNS for the system	Deselected (Disabled)
Ethernet Interface	LAN 1 and LAN 2	LAN 1
Provider	Sets the provider of the DDNS service. > Options available are DynDns and DtDNS . DynDns	
Username	Sets the username to login to the DDNS service.	
Password	Sets the password to login to the DDNS service.	
Host Name	Enters the sub domain name.	
Update Period	Since the IP is dynamic, sets how often to refresh the DNS to point to the server's changing IP address.	16 minutes

3.2.2.2 Network Service

The **Network Service** submenu controls the remote accesses to the system for live view streaming, playback and management.

To access the **Network Service** submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Config Catalog, click the **Network Setup** | **Network Service**.

The Network Service submenu displays in the Configuration Pane.

	The Network Service submenu
Λυυο™	
CT-4000(R)	Network Service
> RAID & File System	Management Service Recording Service Metadata Service Web Service
✓ Network Setup	
Network Setup	C Management Service
Network Service	Management Service Enable
	Command Port 5250
> System	
	Save Reset

The **Network Service** menu features three tabbed pages, <u>Management Service</u>, <u>Recording Service</u>, <u>Metadata Service</u> and <u>Web Service</u> which will be explicated in the following sections.

3.2.2.1 Management Service

It relies on the **Management Service** tabbed page to enable the **Crystal Titan** for the **Management Server**.

To access the **Management Service** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

 From the Left Toolbar, click the Network Setup | Network Service | Management Service tab.

The Management Service tabbed page opens.

_	The Management Service tabbed page	
Λυυο™		
CT-4000(R)	Network Service	
> RAID & File System	Management Service Recording Service Metadata Service Web Service	
Network Setup Network Setup	S Management Service	
Network Service	Management Service Inable	
> Management	Command Port 5250	
System Firmware Version: 2.0.3	Save Reset	
Free Capacity: 121 GB		

The featured settings on the Management Service tabbed page are:

Setting	Description	Default
Management Service	Enables/disables the Crystal Titan for the Management Server.	Selected (Enabled)
command port	Sets the management port.	5250
Save button	Applies the change.	



For **Management Server** default Port is 5250(TCP) and the server port should be larger than 1000. Also the command port cannot be the same.

3.2.2.2 Recording Service

It relies on the **Recording Service** tabbed page to enable the **Crystal Titan** for the **Recording Server**.

To access the **Recording Service** tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Toolbar, click the **Network Setup** | **Network Service** | **Recording Service** tab.

The **Recording Service** tabbed page opens.

	The needing service tabled page	
Λυυο™		
CT-4000(R)	Network Service	
RAID & File System Network Setup Network Setup	Management Service Recording Service Metadata Service Web Service Recording Service Service Service Service Service	
Network Service	Recording Service C Enable	
> Management > System	💭 Login Management Server	
Firmware Version: 2.0.3 Free Capacity: 121 GB	IP Address 127.0.0.1 Command Port 5250	
	Username admin	
	Password	
	Recording Server LAN Settings	
	LAN Port 5251	
	Recording Server WAN Settings	
	IP Address	
	Port 9208	
	Save Reset	

— The Recording Service tabbed page

The featured settings on the **Recording Service** tabbed page are:

Group	Setting / Info	Description	Default
Recording service	Recording service	Enables/disables the Crystal Titan for the Recording Server.	Selected (Enabled)
Login Management	IP address	Sets the IP address of the Recording Server.	
Server	command port	Sets the recording port.	5250

	username	Enters the username to login the Recording Server .	admin
	password	Enters the password to login the Recording Server .	admin
LAN Settings	LAN 1 Port	Sets the LAN port for the Recording Server.	5251
WAN Settings	IP Address	 Sets the IP address of the WAN for the Recording Server. This setting can only work when port forwarding is done. To use WAN settings, the Management Server, Recording Server and Metadata Server all require port forwarding. 	
TAN Settings	Port	 Sets the WAN port for the Recording Server. This setting can only work when port forwarding is done. To use WAN settings, the Management Server, Recording Server and Metadata Server all require port forwarding. 	12
Save button		Applies the change.	

	To use WAN settings, the Management Server , Recording Server and Metadata Server all require port forwarding.
Q	For Recording Server default Port is 5251(TCP) and the server port should be larger than 1000. Also the command port cannot be the same.

3.2.2.3 Metadata Service

It relies on the **Metadata Service** tabbed page to enable the **Crystal Titan** for **Metadata Server**.

To access the Metadata Service tabbed page:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Tool bar, click the **Network Setup | Network Service | Metadata** Service tab.

The Metadata Service tabbed page opens.

			_ The Metadata Service ta	bbed page
Λυυο™				
CT-4000(R)	Network Service			
 RAID & File System Network Setup 	Management Service Recording	J Service Metadata Service	Web Service	
Network Setup	Metadata Service			
Network Service	Metadata Service	Enable		
> Management > System	💭 Login Management Server			
	IP Address	127.0.0.1		
Firmware Version: 2.0.3 Free Capacity: 121 GB	Command Port	5250		
	Username	admin		
	Password	••••		
	🕄 Metadata Server LAN Settin	ngs		
	LAN Port	5252		
	🕄 Metadata Server WAN Setti	ings		
	IP Address			
	Port	9209		
	Save Reset			

The featured settings on the includula set nee tablea page are.				
Group	Setting / Info	Description	Default	
Metadata service	Metadata service	Enables/disables the Crystal Titan for Metadata Server.	Selected (Enabled)	
	IP address	Sets the IP address of the Metadata Server.		
Login	command port	Sets the metadata port.	5250	
Management Server	username	Enters the username to login the Metadata Server .	admin	
	password	Enters the password to login the Metadata Server .	admin	
LAN Settings	LAN 1 Port	Sets the LAN port for the Metadata Server.	5252	
WAN Settings	IP Address	 Sets the IP address of the WAN for the Recording Server. This setting can only work when port forwarding is done. To use WAN settings, the Management Server, Recording Server and Metadata Server all require port forwarding. 		
WAN Settings	Port	 Sets the WAN port for the Recording Server. This setting can only work when port forwarding is done. To use WAN settings, the Management Server, Recording Server and Metadata Server all require port forwarding. 	12	
Save button	•	Applies the change.		

The featured settings on the Metadata Service tabbed page are:



To use WAN settings, the **Management Server**, **Recording Server** and **Metadata Server** all require port forwarding.

For **Metadata Server** default Port is 5252(TCP) and the server port should be larger than 1000. Also the command port cannot be the same.

3.2.2.2.4 Web Service

It relies on the Web Service tabbed page to setup the Crystal Titan web server port.

To access the Web Service tabbed page:

3. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

4. From the Left Tool bar, click the **Network Setup** | **Network Service** | **Web Service** tab.

The Web Service tabbed page opens.

- The Web Service tabbed page

Network Servi	ce		6		
Management Service	Recording Service	Metadata Service	Web Service		
	-				
💭 Web Server					
	Port 80				
Savo Posot	_				
Save Reset					
	Management Service	Web Server	Management Service Recording Service Metadata Service Web Server Port 80	Management Service Recording Service Metadata Service Web Service Web Service Port 80	Management Service Recording Service Metadata Service Web Service

The featured settings on the Management Service tabbed page are:

Setting	Description	Default
command port	Sets the web port.	80
Save button	Applies the change.	



For **Web Server** default Port is 80. Also the command port cannot be the same. If utilizing Firefox, it's suggested not to modify the web service port due to Firefox limitation.

3.2.3 Management

It relies on the **Management** menu to change the password to the system, to view the system's hardware logs, and to recover factory defaults.

To access the **Management** menu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

5. From the Left Toolbar, click the **Management**.

The Management menu unfolds the Change Password, Log System and Load Configuration submenus.

	The Management menu unfolds the Change Password, Log System and Load Configuration submenus.
∩∪uo™	
CT-4000(R)	Change Password
> RAID & Fi + System > Network S +tup	Change Hardware Password
✓ Management	💭 Change Hardware Password
Change Password	Hardware username admin 🗸
Log System	New Hardware Password
Load Configuration	Retype Hardware Password
> System	OK Reset
Firmware Version: 2.0.3	
Free Capacity: 121 GB	

The features submenus are <u>Change Password</u>, <u>Log System</u> and <u>Load Configuration</u> which will be explicated in the following sections.

3.2.3.1 Change Password

Use the **Change Password** to change the password to login the **Management Server**.

To access the Change Password submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Toolbar, click the **Management | Change Password**.

The **Change Password** tabbed page displays in the Configuration Pane.

The Change Password tabbed page
Change Password
Change Hardware Password
💭 Change Hardware Password
Hardware username admin 🗸
New Hardware Password
Retype Hardware Password
OK Reset

Use the **Change Password** tabbed page to change the password to login the **Crystal Titan**.

3.2.3.2 Log System

The **Log System** submenu allows users to view the **Management Server's** hardware logs including power-on, shutdown, storage activity and so on.

To access the Log System submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Toolbar, click the **Management | Log System**.

The **Hardware Log** tabbed page opens in the Configuration Pane showing a list of the **Management Server's** hardware logs.

		THC I	laidwale Log tabbed page		
Λυυο™					
CT-4000(R)	Log System				
> RAID & File System	Hardware Log				
🗸 Management	🕄 Hardware Log List				
Change Password	Last 20 <u>100 500 1000 all</u>	logs			
 Log System 	<< < † > >>				
 Load Configuration 	Date / Time	Level	Message		
> System	2013/10/30 (Wed) 17:39:19	info	Enable smart fan		
	2013/10/30 (Wed) 17:39:19	info	Disable smart fan		
	2013/10/29 (Tue) 13:52:48	info	Connect to database service successfully		
	2013/10/27 (Sun) 01:00:05	info	Fail to adjust time.		
	2013/10/25 (Fri) 16:43:49	info	Connect to database service successfully		
	2013/10/23 (Wed) 10:45:35	info	Connect to database service successfully		
	2013/10/23 (Wed) 10:45:35	info	Start database service successfully.		
	2013/10/23 (Wed) 10:45:33	info	Disconnect to database service successfully		
	2013/10/23 (Wed) 10:44:06	alert	No volume setting for database service, we will not start database service.		
	2013/10/23 (Wed) 10:44:04	alert	No volume setting for database service, we will not start database service.		
	2013/10/20 (Sun) 01:00:04	info	Fail to adjust time.		
	2013/10/18 (Fri) 10:25:47	info	Start LAN eth0 with static IP 192.168.5.58		
	2013/10/18 (Fri) 10:25:46	info	Start LAN eth1 with static IP 192.168.1.59		
	2013/10/17 (Thu) 18:32:23	alert	No volume setting for database service, we will not start database service.		
	2013/10/17 (Thu) 18:32:21	alert	No volume setting for database service, we will not start database service.		

The Hardware Log tabbed page

3.2.3.3 Load Configuration

The **Load Configuration** submenu allows users to restore the system settings to factory defaults.

To access the Load Configuration submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Toolbar, click the **Management | Load Configuration**.

The Load Configuration tabbed page opens in the Configuration Pane.

	The Load Configuration tabbed
Λυυο™	
CT-4000(R)	Load Default Configuration
> RAID & File System	Load Default Configuration
> Network Setup	
👽 Management	C Load Default Configuration
 Change Password 	Uncheck Network Settings if you want to keep IP and port settings. Click the "Load" button to load the Titan to factory default values including password, services and all configurations.
Log System	Optional Vetwork Settings
Load Configuration	
> System	Load
Firmware Version: 2.0.3 Free Capacity: 121 GB	

Group	Setting / Info	Description	Default
Load Default Settings	Network Settings	Enables/disables the restoration of the network settings.	Selected (Enabled)
Load button		Runs the restoration of system settings.	

3.2.4 System

Use the **System** menu to view system information, configure system settings and manage system upgrade. This menu also enables re-opening the **Install Wizard** which launches during the system's very first power-on.

To access the **System** menu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Toolbar, click the **System**.

The System menu unfolds the System Information, System Settings, Upgrade, Date/ Time and Reboot / Shut down submenus.

The System menu unfolds the System Information, System Settings, Upgrade, Date / Time and Reboot / Shutdown submenus.

∩∪uo™		
CT-4000 (R)	System Information	
> RAID & File System > Network Se up	System Information	
> Management	Information	
v System	Operating System	Linux
	NVR Version	02.00.0000.0066
 System Information 	Device Pack Version	02.18.0000.0016
 System Settings 	CPU I	Intel(R) Atom(TM) CPU D525 @ 1.80GHz
> Upgrade	MAC Address 1	90:2B:34:84:60:A6
> Date / Time	MAC Address 2	90:2B:34:84:60:A7
	CPU Temperature	26.000 °C
Reboot / Shut down	CPU Fan Speed	6428 RPM
Firmware Version: 2.0.3	System Temperature	36.000 °C
Free Capacity: 121 GB	System Fan Speed	946 RPM

The features submenus are <u>System Information</u>, <u>System Settings</u>, <u>Upgrade</u>, <u>Date /</u> <u>Time</u> and <u>Reboot / Shut down</u> which will be explicated in the following sections.

3.2.4.1 System Information

The **Information** submenu enables viewing some important system information including the hardware information and firmware information.

To access the **System Information** submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Toolbar, click the **System | System Information**.

The System Information tabbed page displays in the Configuration Pane.

		The System mornation tabbed page
Λυυο™		
CT-4000(R) > RAID & File System	System Information	
 Network Setup Management 	© Information	
 ✓ System System Information 	Operating System NVR Version	Linux 02.00.0000.0066
 System Settings 	Device Pack Version CPU	02.18.0000.0016 Intel(R) Atom(TM) CPU D525 @ 1.80GHz
 Dgrade Date / Time 	MAC Address 1 MAC Address 2 CPU Temperature	90:2B:34:84:60:A6 90:2B:34:84:60:A7 26:000 °C
Reboot / Shut down	CPU Fan Speed System Temperature	6428 RPM 6.000 °C
Firmware Version: 2.0.3 Free Capacity: 121 GB	System Fan Speed	946 RPM

The System Information tabbed page

3.2.4.2 System Settings

Use the **System Settings** submenu to configure and optimize the system for your applications.

To access the **System Settings** submenu:

1. Login to NUUO Crystal Network Video Recorder web page as described in Login.

The web settings open.

2. From the Left Toolbar, click the **System | System Settings**.

The **System Settings** submenu opens in the Configuration Pane and shows the **Fan Control** tabbed page by default.

The **System Settings** submenu opens and shows the **Fan Control** tabbed page by default.

	······································
Λυυο™	
CT-4000(R)	System Settings
	Fan Control APC UPS
> Network Setup	
	S Fan Control
✓ System	System Temperature 36.000 °C
System Information	System Fan Speed 946 RPM
System Settings	Setting O Enable O Disable
> Upgrade	OK Cancel
Date / Time	
Reboot / Shut down	
Firmware Version: 2.0.3 Free Capacity: 121 GB	

The featured tabbed pages are <u>Fan Control</u> and <u>APC UPS</u> which will be explicated in the following sections.

3.2.4.2.1 Fan Control

The **Fan Control** tab page enables viewing some important system information including system temperature, system fan speed and setting information.

To access the Fan Control tabbed page:

- 1. Login to NUUO Crystal Network Video Recorder web page as described in Login.
- 2. The web settings open.
- 3. From the Left Toolbar, click the **System | System Settings |Fan Control** tabbed page.

The Fan Control tabbed page opens.

	The Fan Control tabbed page
Λυυο™	
CT-4000(R)	System Settings
> RAID & File System	Fan Control APC UPS
> Network Setup	🕄 Fan Control
> Management	<u> </u>
✓ System	
System Information	System Fan Speed 946 RPM
System Settings	Setting Enable Disable
> Upgrade	OK Cancel
> Date / Time	
Reboot / Shut down	

The featured settings and delivered info are:

Group	Setting	Description	Default
	System Temperature	Delivers the system temperature.	
Fan Control	System Fan Speed	Delivers the system fan speed.	
	Setting	Delivery the setting status	disable
OK button		Applies the change.	
Cancel button		Clears the change.	

3.2.4.2.2 APC UPS

If the **Management Server** is used with an UPS module, it is able to deal with accidental power failure or unstable power supply. The **APC UPS** tabbed page configures how the system reacts to such scenario by defining the timing for auto shutdown with APC Uninterruptable Power Supply (UPS) battery power. This tabbed page also delivers the info about the APC UPS module used.

To access the **APC UPS** setting:

- 1. Attach the APC UPS to one of the unit's USB ports.
- 2. Login to NUUO Crystal Network Video Recorder web page as described in Login.
- 3. The web settings open.
- 4. From the Left Toolbar, click the **System | System Settings | APC UPS** tabbed page.

The **APC UPS** tabbed page opens.

	The APC UPS tabbed page	
Λυυο™		
CT-4000(R)	System Settings	
> RAID & File System	Fan Control APC UPS	
> Network Setup	Information	
> Management	Manufacturer APC	
✓ System	Product Name Smart-UPS 3000 FW:655. 18.D USB FW:7.4	
System Information	Serial Number JS0939022759	
System Settings	Service Status ON	
> Upgrade	Power Failure Action	
> Date / Time	Disable	
Reboot / Shut down	System shutdown as power of the UPS remains %	
	O System shutdown as power of the UPS remains Min.	
Firmware Version: 2.0.3	DI/ Canast	
Free Capacity: 121 GB	OK Cancel	

The featured settings and delivered info are:

Group	Setting	Description	Default
	Manufacturer	Delivers the manufacturer of the UPS module.	
Information	Product Name	Delivers the model name of the UPS module.	
	Serial Number	Delivers the serial number of the UPS module.	
	Services Status	Delivers if the UPS module is servicing.	
Power Failure Action	Disable	Enables/disables the operating system's actions to deal with power failure.	Selected (Disabled)
	Shutdown as power of the UPSremains _ %	Sets how low does the UPS battery power drain down to before the operating system shuts down.	
	Shutdown as power of the UPSremains_Min	Sets how long should the unit run on UPS battery power before the operating system shuts down.	
OK button		Applies the change.	
Exit button		Clears the change.	



For **Power Failure Action**, an USB connection is needed between the unit and the UPS to check the status of UPS.

3.2.4.3 Upgrade

Exactly as the title advertises, the **Upgrade** tabbed page enables system upgrade to bring the system to a newer version that promises better performance or new functions. Besides, this tabbed page also delivers the current firmware version and device pack version.

To access the **Upgrade** setting:

- 1. Login to NUUO Crystal Network Video Recorder web page as described in Login.
- 2. The web settings open.
- 3. From the Left Toolbar, click the **System | Upgrade**.
- 4. Go to <u>www.nuuo.com</u> for FW download, browse the FW for upgrading and click the **OK** button.
- 5. A confirmation dialog pops up. Click the **OK** button to start upgrade process.
- 6. After upgrade, the system will restart. You need to re-access the unit again after this.

The **Firmware Upgrade** tabbed page opens in the Configuration Pane.

The **Firmware Upgrade** tabbed page.

CT-4000(R)	Syster <mark>n</mark> Upgrade	
	Firmware opgrade	
	🕄 Upgrade	
✓ System	Current NVR Version 02.00.0000.0039	
System Information	Current Device Pack version 02.14.0000.0029	
System Settings	Select file	Browse
> Upgrade	OK Cancel	
 Reboot / Shut down 		
Firmware Version: 2.0.0		
Free Capacity: 381 G8		

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The featured facility and delivered info are:

Info / Facility	Description	
Current NVR Version	Delivers the server's current firmware version.	
Current Device Pack Version	Delivers the server's current device pack version.	
Select File (and the Browse button)	Browses for the firmware and runs the upgrade.	

Ő	The FW upgrade includes Crystal Titan server FW upgrade and device pack upgrade. You can only upgrade camera device pack to add camera in device pack new version without upgrade Crystal FW.
Q	The network bandwidth should be more than 4 mbps when upgrading firmware.

3.2.4.4 Date / Time

Access the **Date/Time** submenu to configure the date, time, time zone of your locale and other time-related parameters for the server.

To access the **Date/Time** setting:

- 1. Login to NUUO Crystal Network Video Recorder web page as described in Login.
- 2. The web settings open.
- 3. From the Left Tool bar, click the **System | Date Time**.
- 4. Choose the time zone.
- 5. Configure the year, month, day and time manually, or enable Network Time to synchronize time automatically. When Network Time enabled, the date/time settings will be grayed out.
- 6. Assign time server and update interval if choosing Network Time. You can also click "**Update Now**" to update date/ time right away.
- 7. Check the Adjust clock for daylight saving changes option and select the time change of daylight saving time in your location. Choose the start time and end time of recurrence.
- 8. Click the **OK** button to restart the system.

The **Setup** tabbed page opens in the Configuration Pane.

	The Setup tabbed page.
Λυυο™	
CT-4000(R) > RAID & File System	Nate / Time
> Network Setup > Management	Time Zone
System System Information System Settings	Time Zone (GMT+08:00) Beijing, Hong Kong, Kuala Lumpur, Perth, Singapore, Taipei, Urumqi V Date/Time O Use local date/time
S Upgrade Date / Time Reboot / Shut down	2013 V October V 31 V 11 V 47 15 V
Firmware Version: 2.0.3 Free Capacity: 121 GB	Date/Time Synchronize with internet time server Internet Time Server: time windows.com (e.g. time.nist.gov, or Management Server IP) Update Time Internal : Every week V Sunday V 1:00 V Update Now
	Daylight Saving Time
	Daylight Saving Time Adjust the clock for daylight saving changes +2 v hour(s) Start Time January 1 1:00 v First Monday 1:00 v
	End Time United States
	OK Cancel To use NTP function, you need Internet access to the LAN where the unit is installed.

The **Setup** tabbed page.

The featured settings are:

Time Zone	Time Zone	Sets the time zo	GMT+08:00			
		Enable check b	ох	Enables/disables network time.	Deselected (Disabled)	
NTP	Network Time	Synchronize with internet time server		 Enables/disables the synchronization with internet time server. This setting is only available when network time is enabled. When enabled, the Date/Time group box become unavailable. 	Deselected (Disabled)	
Setup		Works as internet time server				
	Time Server	Sets the time setThis setting is enabled.				
	Update Now button	 Updates the sys This setting is enabled. Updating systems restart. 	Weekly on Sunday, at 01:00 o'clock			
	Year					
Date /	Month	Sets system dat				
Time	Day	Sets system dat				
	Time					
	Daylight Saving Time	Adjust the clock for daylight saving changes	or ht Enables/disables daylight saving time.			
Daylight Saving		hours drop box Defines how much time should the system time be adjusted forward/backward for.			+ 2 hours	
Time	Start Time	 Defines the date to start applying daylight saving time. This setting is available only when daylight saving time is enabled. 			January the 1 st , 1:00 AM	
	End Time	 Defines the date to stop applying daytime saving time. This setting is available only when daylight saving time is enabled. 			January the 2 nd , 1:00 AM	
Save button		Applies the chai	nge.			
Exit button		Clears the change.				

3.2.4.5 Reboot / Shut down

Access this **Reboot / Shutdown** submenu to safely turn off or restart the system.

To access the **Reboot / Shutdown** submenu:

- 1. Login to NUUO Crystal Network Video Recorder web page as described in Login.
- 2. The web settings open.
- 3. From the Left Tool bar, click the **System** | **Reboot / Shutdown**.

The **Options** tabbed page displays in the Configuration Pane.

Г

The Options tabbed page	

Λυυο™	
CT-4000(R) RAID & File System Network Setup	Relioot / Shut down
> Management	Options List Options Reboot Shut down
 System Information System Settings 	OK Cancel
Vpgrade Date / Time	
Reboot / Shut down	
Firmware Version: 2.0.3 Free Capacity: 121 GB	

4. Select **Reboot** or **Shutdown** and click the **OK** button to restart or power off the system.

3.3 Management Server



The feature settings are same with NuClient, please refer to Interface Overview.





4. Application Installation

NuClient is the software that enables **Management Server** for **Live View** (instant video playback), **Playback** (recorded video playback) and **Config** (system configuration). **NuMatrix** is the software that enables video wall for **Live View**.

This section will walk you through the installations of the **NuClient** and **NuMatrix**, in both **Windows** O.S. and **Mac** O.S.

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Please note that only when have an "Ultimate level" license will you be able to see the Matrix interface on NuClient.

4.1 NuClient

4.1.1 Install on Windows OS

This section will walk you through the installation of the **NuClient** in Windows operating system.

4.1.1.1 System Requirement

The **NuClient** requires the following hardware and software to run properly in Windows O.S.:

Client PC Minimum Requirements				
СРИ	Intel Core 2 Duo, 2.6GHz			
Display Card	OpenGL 2.0 and later			
OS Supported	Windows XP 32 bit	Windows 7 32/64 bit		
RAM	1GB	2GB		
User Interface	HTTP Web browser - Internet Explorer 8 and later NUUO client application program			

4.1.1.2 Proceed to Install

1. Insert the CD into your CD-ROM drive and double-click **Setup.exe**.

纪台管理 · 唐彝	新增算科英						- 12	
★ 我的希美 ● 下町 ■ 桌西 包 希近的位置 ○ 体徴理 ○ 文件 ● 前時 目 相氏	Manual Ox041f	0x0404	0x040s	0x040b	0x040c 0x040c	0.040e	0x041d 0x0411	0x041
■ 0441 ■ 至月 ▲ 本理記録(C:) □ 本理記録(D:) ■ Transcend(H) ■ iPhone	0x0413 data2	0x0415	0x0416	ざ setup	0x0424	0x0804	dətəl	data1.h
🗣 網道								

The installer then opens.

NUUO Crystal Series - InstallShield Wizard
Preparing Setup Please wait while the InstallShield Wizard prepares the setup.
NUUD Crystal Series Setup is preparing the InstallShield Wizard, which will guide you through the rest of the setup process. Please wait.
InstallShield
Cancel



6. Click the **Next** button to proceed.

The License Agreement opens.



7. Select I accept the terms of the license agreement.

A Customer Information window opens.

ſ	NUUO Crystal Series - InstallShield Wizard
	Customer Information Please enter your information.
	Please enter your name and the name of the company for which you work. User Name:
	NUUO Company Name:
	NUUD
	InstallShield Cancel

8. Enter your name and the name of your company. Then click the **Next** button.

A Setup Type window then opens and presents two types of installation, Complete and Custom.

NUUO Crystal Series - InstallShield Wizard					
Setup Type Select the setup type to install.					
Please select	a setup type.				
Complete	All program features will be installed. (Requires the most disk space.)				
Custom	Select which program features you want installed. Recommended for advanced users.				
InstallShield ———	<pre>Cancel</pre>				

Select Complete and click the Next button to proceed.
 OR

Select **Custom** and click the **Next** button to proceed.

• **Complete**: To install everything in this package.

NUUO Crystal S	eries - InstallShield Wizard				
Setup Type Select the setup type to install.					
Please select	a setup type.				
Complete	All program features will be installed. (Requires the most disk space.)				
Custom	Select which program features you want installed. Recommended for advanced users.				
InstallShield ——	Cancel				

 Custom: To install a custom selection of applications and to configure the installation directory.
NUUO Crystal Se	eries - InstallShield Wizard	
Setup Type Select the setup type to install.		
Please select	a setup type.	
Complete	All program features will be installed. (Requires the most disk space.)	
Custom	Select which program features you want installed. Recommended for advanced users.	
InstallShield	<pre> Cancel Cancel </pre>	

10. Click the **Next** button to install the software to the default folder.

OR

Click the **Change** button and browse for some other folder to install the software to. Then click the **Next** button to proceed.

NUUO Crystal Series - InstallShield Wizard	x
Choose Destination Location Select folder where setup will install files.	
Install NUUO Crystal Series to: C:\Program Files (x86)\NUUO\Crystal Series	Change
InstallShield	Cancel

A Select Features window then opens.

NUUO Crystal Series - InstallShield Wizard	×
Select Features Select the features setup will install.	X
Select the features you want to install, and deselect the fe	atures you do not want to install.
✓ NuClient ✓ Backup Player ✓ Offline License Tool ✓ Installation Wizard ✓ Verification Tool ✓ NuMatrix	Description NuClient
187.58 MB of space required on the C drive 189302.30 MB of space available on the C drive InstallShield ————————————————————————————————————	k Next > Cancel

Select the feature(s) to install and deselect the feature(s) that you don't want.
 Then click the **Next** button to proceed. Then click the **Install** button.

NUUO Crystal Series - InstallShield Wizard	×
Ready to Install the Program The wizard is ready to begin installation.	
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Ba the wizard.	ck. Click Cancel to exit
InstallShield	all Cancel

The installation then starts, progresses and finishes.

NUUO Crystal Series - InstallShield Wizard	×
Setup Status	No.
The InstallShield Wizard is installing NUUO Crystal Series	
Installing	
C:\\{6C6E9892-4D01-41ED-90BC-ED3CA3DEBF54}\\ISSetup.dll	
InstallShield	
	Cancel

As soon as the installation finishes, the installer disables the UAC on your Windows O.S. If the UAC isn't disabled, O.S. restart is required.



12. Click **Yes** to restart the O.S. immediately or **No** to restart it later. Then click the **Finish** button to finish and quit the installation.

NUUO Crystal Series - InstallShield Wizard		
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed NUUO Crystal Series. Before you can use the program, you must restart your computer.	
	 Yes, I want to restart my computer now. No, I will restart my computer later. 	
	Remove any disks from their drives, and then click Finish to complete setup.	
	< Back Finish Cancel	

4.1.1.3 Launch NuClient in Windows OS

After the O.S. restarts, the installation is done. As soon as the system is successfully installed, a shortcut to launch the software becomes available at the **Start** button | **All Programs**.

4.1.2 Install on MAC OS

This section will walk you through the installation of the **NuClient** in MAC operating system.

4.1.2.1 System Requirement

The **NuClient** requires the following hardware and software to run properly in MAC O.S.:

Client PC Minimum Requirements		
CPU	Intel Core 2 Duo, 2.6GHz	
Display Card	OpenGL 2.0 and later	
OS Supported	Windows XP 32 bit	Windows 7 32/64 bit Mac 10.6/10.7
RAM	1GB	2GB
User Interface	HTTP Web browser - Internet Explorer 8 and later and Firefox 7.0.1 NUUO client application program	

		We suggest that you avoid using on-board graphics card which will give you
		a poor performance. NuClient may pop up an error dialog saying "Videos
cannot be displayed on the Client PC with on-board graphic card" an on-board graphics card.		cannot be displayed on the Client PC with on-board graphic card" for using
		an on-board graphics card.
		We also recommend that the drivers of graphics cards be upgraded to the latest versions.
		The system requires OpenGL 2.0 or higher versions to be installed. An error
		message will pop up if OpenGL 2.0 or higher versions are not found.
The minimum supported screen resolution 1024x768. NuClient wurder the minimum resolution.		The minimum supported screen resolution 1024x768. NuClient will not run
		under the minimum resolution.
- 1		

4.1.2.2 Proceed to Install

1. Insert the CD into your CD-ROM drive and double-click **NUUO Crystal Titan Series.mpkg** to begin installation.



The installer then opens.

2. Choose your language and click Continue button.

● ○ ○	Install NUUO Crystal Series
	Select the language for this installation from the choices belo
Choose Setup Language	English
Introduction	
License	
Destination Select	
Installation Type	
Installation	
	Go Back Continue

3. Click the Continue button and accept the License Agreement.

000		🙆 Install	NUUO Crystal Series		
		installing the so are license agre	oftware you must ag ement.	gree to the tern	ns
• Chi Lar • Int	Click Agree t and quit the		ck Disagree to cancel	the installation	to
e Lic e De:	Read Lice	ense	Disagree	e Agree	
e Install		using this software If you agree to ab AGREE TO THE T SOFTWARE AND • GRANT OF LICE NUUO, as licensor Surveillance Syste on one computer to contained in this li- reverse engineer, SOFTWARE, or re- the Software. You purpose and limite	, grants to you, the licensee, im of Customer Service Versi and use the SOFTWARE in a cense. You may not rent, lea disassemble, decomplie, or c move any copyright notice or may also not to reproduce t i do one copy only. Except f , you may transfer the Softw.	ad by the terms of this se click "Yes". IF YOU IT, DO NOT USE THIS IVE IT FROM YOUR C a non-exclusive right on (hereinafter the "Si accordance with the te accordance with the te ise, sublicense, modify reate any derivative w r proprietary legend co he SOFTWARE unless or the Software marke	agreement. DO NOT OMPUTER. to install IP OFTWARE") rms (, alter, vork of the intained in s for backup d "Not for
		Print	Save	Go Back	Continue

4. You can choose two types of installation, **Install** and **Customize**. Install: Install everything in this package.



Customize: Install a custom selection of applications.



5. Select the applications you want to install



6. Click on the Install button to start the installation.



7. The system is being installed.



8. Choose **Close** to finish installation.



4.1.2.3 Launch NuClient in MAC OS

After the O.S. restarts, the installation is done. As soon as the system is successfully installed, a shortcut to launch the software becomes available in your **Applications**.

5. Log in

To log in to the system:

- 1. Launch the **NuClient** as described in <u>Launch NuClient in Window OS</u> or <u>Launch</u> <u>NuClient in Mac OS</u>.
- 1. NuClient launches and a login dialog opens.

Connect to Server		_	×
Server address:	192.168.1.10:5250		~
User name:	admin		~
Password:	••••		
		OK Can	cel

2. Enter the server address you are going to connect to, the user name, and the password. Then click the **OK** button.

Once you're logged in, the main interface of the **NuClient** shows.



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6. Log out

To log out from the system:

1. Access NuClient.



2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🔹.

The menu opens.



3. Click Logout.

If you have made any change to the configuration, a dialogs will show and request for your confirmation whether to write the change(s) to the configuration when you log out. To write the change(s) to the server, click the **Yes** button in the dialog.

NUUO NuClient	
2	Question
	Update changes to server now?
_	Yes No

A progress bar will appear to show the writing status.



Once the update is through, the login dialog will re-appear and you are logged out from the system.



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Both your primary monitor and secondary monitors will be closed when you log out.

7. Exit

The NuClient still runs and stays in main memory after you log out from it. To close the software:

1. Access NuClient.



2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.



3. Click Exit.

The **NuClient** is quit.

8. Version information

To see the software version of **NuClient**:

1. Access NuClient.



2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🔹.

The menu opens.



3. Click About.

An **About NuClient** window then opens and shows the software's version, copyright information and the links to NUUO's homepage and its technical support site.



Visit NUUO's technical support site at <u>http://www.nuuo.com/eHelpdesk.php</u>. You may find all sorts of technical information including FAQs, product specifications, and technical contact information.

9. Interface Overview

Understanding the NuClient's user interface helps you navigate the software without any problem. Once you are familiar with the NuClient's UI, you can jump seamlessly within the software.



Live View, Playback and Config tab

9.1 Menu- The Global

To access the **NuClient's** menu:

1. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.



The featured commands are:

Command	Description
Commit Config	 Applies the change(s). This command is efficacious as the commit config on the Config tab, Top Toolbar. See also Screen Terminology.
Restore Config	 Refresh the change(s). Request Server provides the configuration which saved in Management Server. This command is efficacious as the restore config on the Config tab, Top Toolbar. See also Screen Terminology.
Log Export	Opens a Log Viewer tool to export the log of a desired period of time.
Backup Tool	Launches the Backup Tool to save the videos recorded in a desired period of time to a desired local storage.
E-Map Editor	 Opens the E-Map Editor that inserts multiple maps that mark the locations of cameras and I/O. The "E-map" is a graphical way to present cameras and I/O devices to give the administrator an idea of where a camera is located, and the relationship among those devices. Cameras and I/O are overlaid on a street map, a floor plan, or any other custom image files.

Image Fusion Editor	Open the Image Fusion Editor to create a panoramic view by stitching multiple camera images together.
Client Configuration	Access the preference configuration for the software.
Export Config	Save the NuClient configuration to a file.
Import Config	Load a NuClient configuration file.
About	Views the developer and version of the software, NuClient.
Logout	Signs out from the current account. (NuClient will still be running.)
Exit	Quits the software, NuClient .

9.2. Live View

When the system starts and users log in, it is the **Live View** that opens onscreen. If it isn't the **Live View** screen that shows at the moment, click the **Live View** tab from the **NuClient**'s **Top Toolbar** to open the **Live View** screen.

Exactly as its name communicates, the **Live View** is the screen where the instant videos are displayed. Most of the **Live View** screen is occupied by a predominant video area. See <u>Live View</u> to know more about the **Live View** screen.



9.3. Playback

To open the NuClient's Playback screen, click the Playback tab from the Top Toolbar.

The **Playback** is the screen to play the recorded videos. Same as the **Live View** screen, the **Playback** screen is occupied by a predominant video area as well. See <u>Playback</u> to know more about the **Playback** screen.



9.4. Config

From the **Top Toolbar** of the **NuClient**, click the **Config** tab to open the **NuClient**'s "configuration" feature which includes "system configuration", "physical configuration" and the help file of the **NuClient**.

See <u>Settings</u> for the "system configuration" and "physical configuration" featured by the **NuClient**.

~ چ	et to	Live View Playback Confg	1
2	Image: Control Contrection Contrelation Control Control Control	Progenius License Sener Overniew Client Overniew SMTP Address Book Event Action Name: With Management Sever -<	
Date: 2013	3/08/14 Time: 10:07:02 Username: admin Server addre:	ss: 192.168.1.59:5250 CPU loading: 1% Memory usage: Total 8128MB Free 6753MB Network: Displayed streaming bit rate 0.00 kbps	(4)

Number	Title	Description			
		The Top Toolbar features the following onscreen facilities:			
		Facility	Title	Description	
	Top Toolbar	۲	the "global"	Opens the menu of the NuClient . • See <u>NuClient Menu</u> for more details.	
1		ే	apply button	Applies the change(s).	
			åĴ	restore button	Refresh the change(s).
				LivéView PlayBack Config	the tabs
2	Config Catalog	Switches the NuClient between <u>System Config</u> , <u>Physical Config</u> , and Help.			
3	Tree Console	 Provides the tree menu. Features the following onscreen facilities: 			

			lcon	Title	Description
			+	add sign	Adds a user group/device.
			_	delete sign	Deletes the selected user group/device.
			₽Į	ascending button	Sorts all the user group(s)/device in an ascending order.
			ρ	search button	Searches for an user group/ a device.
			ţ.	Restore system/ physical button	Restore system/physical setting.
4	Status Bar				e, user ID, server address, CPU wnload/upload speed.
5	Configuration Pane	Opens the settings featured by a subject of the menu tree when the subject is clicked.			

9.5 Graphic Icon on Tree list

The following icon will display on tree from Physical configuration.		
Graphic icon	Description	
ŵ	Management Server	
Ē.	Recording Server	
р.	Video Device	
•	▶ Camera	
5	▶ Camera DI/DO	
a	IO device	
副	Metadata Server	
	Metadata Source	
z∎ B	Metadata channel	
Í.	Matrix	

The following icon will display on tree from Physical configuration.

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The following icon will display on tree from **System** configuration page.

lcon	Description
3	▶ User group
2	▶ User
8	▶ Role
Ħ	Schedule
	▶ Layout

Special notification will overlay on icon from tree list include:

Graphic icon	Description
	Configuration is modified but haven't commit to Management Server.
<u>~</u>	Click the apply button on the Top Toolbar to apply the change(s).
×	The device is disabled.
*	The device is disconnect
8	Can't get device information.

10. Settings

The **Config** tab features two types of configuration. One is the "system configuration"; the other is the "physical configuration". The "system configuration" means to configure **Management Server** basic profile setting such as user group, role, schedule and layout while the "physical configuration" means to configure the **Management Server** in order to configure all the physical devices within the network such as recording server, Metadata Server, Matrix Server, video device, camera and I/O devices . Generally the "system configuration" should be done prior to the "physical configuration".

To access the **NuClient** settings:

 Launch the NuClient as described in Launch NuClient in Window OS or Launch NuClient in Mac OS.

The NuClient opens onscreen and shows the Live View tabbed page by default.

		The Live View tabbed page
چ چ		rback Config
View List ×	Matrix	×
 ⊞⁴ Public Views ⊞	Profile: N/A	暇 前 タ
	101 station1 default name	• 102 Stairway default name •
+-* 🎙 🖗 🗐		
Content List × 		
PTZ Panel X		
PTZ Preset(s) Select one PTZ Preset(s) Select one PTZ Preset(s) PTZ Panel Propentes	103 Reception default name	104 Counting defaultname
Content Title:		
Event List Properties Date: 2013/06/23 Time: 22-2	¹ Monitor#1, View: 2x2 (11 contents invisible) 16:46 Username: admin Server address: 220.132.124.68:9114 CPU loading: 5% Memory us	sage: Total 8092MB Free 3714HB Network: Download 127 62 kbps Upload 11.18 kbps

2. From the **Top Toolbar**, click the **Config** tab.

The **Config** tab opens. The Config tab opens 2l

Physical Configuration 10.1

The Management Server runs the administrative software to control all the networked devices including the Recording Server, Metadata Server and Matrix. Hence, it relies on the Management Server to configure all the networked devices.

To access the **Physical Config** ("physical configuration"):

Open the NuClient settings as described in <u>Settings</u>. 1.

The NuClient settings open.

1. Click the **Physical Config** icon from the **Config Catalog**.

The physical configuration then opens onscreen and shows the Management Server settings by showing the Properties tabbed page in the Configuration Pane.

The **physical configuration** opens and shows **Management Server** settings by showing the **Properties** tabbed page in the **Right Pane**.

		_ °	×
€ 😴		Live View Playback Config	
	Constant Server C	Properties License Sever Overview Client Overview SMTP Address Book Event Action Name: Management Bener Imagement Bener Imagement Bener Imagement Bener Imagement Bener Description: Imagement Bener Imagement Bener Imagement Bener Imagement Bener Volume: Volume A Imagement Bener Imagement Bener Imagement Bener Volume: Volume A Imagement Bener Imagement Bener Imagement Bener Volume: Volume A Imagement Bener Imagement Bener Imagement Bener Choose configuration: Imagement Configuration Imagement Bener Imagement Bener Imagement Bener Imagement Bener Imagement Bener Imagement Bener Volume: Volume A Imagement Bener Imagement Bener Imagement Bener Imagement Bener Imagement Bener Imagement Bener Volume: Volume A Imagement Bener Imagement Bener Imagement Bener Imagement Bener Imagement Bener Imagement Bener Volume: Volume A Imagement Bener Imagement Bener Imagement Bener	

The **physical configuration** features the following settings:

I

Setting	Description
Recording Server	Configures the Recording Server to control one or more "video device(s)" that further controls one or more camera(s) or camera DI/DO. See <u>Configure Recording Server</u> for the settings.
Metadata Server	 Configures the Metadata Server to host the third-party device servers and archive their data. Configures the Metadata Server to stream and archive the data from the third-party device servers (such as POS server, Access Control server, and LPR server) so the NuClientis able to combine the data with video images for more sophisticated application such as theft investigation. See Configure Metadata Server for the settings.
Matrix	 Enables an unlimited number of video walls and video displays. See <u>Configure Matrix</u> for the settings.



Please note that only when have an "Ultimate level" license will you be able to see the Matrix interface on NuClient.

10.1.1. Configure Management Server

To configure the Management Server:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

Physical Config icon from the **Config Catalog**.

2. The **Tree Console** then shows three setting groups: **Recording Server**, **Metadata Server** and **Matrix**.



3. From the **Tree Console**, click the topic **Management Server**.

The **Properties** tabbed page then opens in the **Configuration Pane** while the other six tabbed pages are hidden.

The Properties tabbed page opens in the Configuration Pane to configure the Management Server.

4. Access one of these tabbed pages to configure the Management Server.

Tab	Description
Properties	 Enters the information about the Management Server including the name, description, RAID (disk) volume and so on. See <u>Properties</u> for the settings.
License	Activates/transfers the licenses (to use NUUO software) for the networked physical devices. See License for the settings.
Server Overview	Delivers a general view of all the servers under the control of the Management Server , including the Recording Server(s) , Metadata Server(s) and Matrix(s) . See <u>Server Overview</u> for the settings.
Client Overview	 Delivers a general view of the clients connected to the Management Server. See <u>Client Overview</u> for the settings.
SMTP	Sets up the "Simple Mail Transfer Protocol" for the Management Server so it can send out emails. See <u>SMTP</u> for the settings.
Address Book	Sets up the emails to receive the Management Server 's notifications for the configured camera events, input events and system events. See <u>Address Book</u> for the settings.
Event Action	 Enables/disables the event(s) that will launch action(s) from the Management Server. See Event Action for the settings.

A function overview of these tabbed pages:

10.1.1.1. Properties

It relies on the **Properties** tabbed page to enter the information about the **Management Server** including the name, description, RAID (disk) volume and so on.

To access the **Properties** tabbed page that configures the **Management Server**:

1. From the Tree Console, click the topic Management Server.

The Properties tabbed page then opens in the Configuration Pane.

	Configuration Pane to configure the Management
8 • A A	_ 문 X
	entres License Server Overview Client Overview SMTP Address Book Event Action Name: Management Server Description:
ि मुझु Hathix 1 Choos मि Hathix 2	e configuration: Current system configuration Apply target volume configuration (Management Server 1 1 0 0 1)

- The **Properties** tabbed page then opens in the

The featured settings on the **Properties** tabbed page are:

Setting	Description	Default
Name	Names the Management Server.	"Management Server"
Description	Provides a brief description for this Management Server for the easier identification of it.	-
Volume	 Assigns a "volume" to the Management Server. A "volume" is one or more disk drives working together as a logical drive. Video recording requires a volume to be created first. For RAID setting, go to web setting first. 	Volume A
Choose configuration	 If the volume chosen has existing configuration, there are two options. 1. Current system configuration 2. Apply target volume configuration 	

10.1.1.2. License

It relies on the **License** tabbed page to activates/transfer the licenses (to use NUUO software) for the physical devices on the **Management Server**'s network.

To access the License tabbed page that configures the Management Server:

1. From the Tree Console, click the topic Management Server.

The **Properties** tabbed page then opens in the **Configuration Pane**.

The **Properties** tabbed page opens in the **Configuration Pane** to configure the **Management Server**.

⊙ ~ <i>> ></i>	_ 문 X
Benerating Server 2 Benerating Server 4 Benerating Server 3 Benerating Server 3 Metadata Server 1 Metadata Server 2 Metadata Server 2 Metadata Server 4 Metadata Server 4	Name: Vanagement Server Description: Image: Volume A Volume: Volume: A osse configuration: Current system configuration (Management Server 1 1.0.0.1)

2. Click the License tab.

The License tabbed page then opens at the **Configuration Pane** showing an overview of the networked devices' current licensing status for NUUO software as well as some settings. The License tabbed page opens in the **Configuration Pane**.

						_ & ×
🌏 🗸	et to		Live View Playback	Config		_ & X
Composite Management Server Control in Server Control	Properties License License status License Type	Server Overview Client Overview	SMTP Address Book	Event Action		
_	🖽 💑 Counting					
2	🗉 💰 Immervision	Generic POS channel				
	⊞ 💐 Hall (1.3M) ⊡ 💐 Vito Supermarket	Ultimate video channel				
관 값 Mathra 한 값 Dahua effice camera 한 값 dahua HDBW3300 - 謂 io device - 해 10 device (2)	License list					
	🗆 🛱 Metadata Server	Select SN		Туре	Channel	
	🗉 🗱 Demo site Metadata Server 🗆 🖳 Matrix	5AAF-A5F1-BE05-434B		Ultimate video channel		
- 🗐 Matrix	F363-C203-BABD-9713		Generic POS channel			
		Online / Offline: 🌒 Online 💮 Offline				
	Activate type: 🍨 Activate 🔵	Transfer				
	Enter license					
	Import licens	e file:				
		Activate				
	+ - [^] zt					

Take a look at the NUUO software license overview table:

License Type	Total Quantity	Activated Quantity	Unactivated Quantity
Falco access control channel	6		6
Generic POS channel	11		10
Ultimate video channel	8	7	

Item	Description		
	Delivers what the user is permitted to use the software for.Three license types are available:		
License Type Video License Metadata License			
Total Quantity	Delivers the total quantity of the license(s) within the Management Server.		
Available Quantity	Delivers the quantity of the available license(s) from the Management Server assign to Recording Server and Metadata Server .		
Used Quantity	Delivers the quantity of the used license(s) from the Management Server assign to Recording Server and Metadata Server .		

The featured settings on the License tabbed page are:

License list			
Select SN		Туре	Channel
5AAF	F-A5F1-BE05-434B	Ultimate video channel	64
F363	3-C203-BABD-9713	Generic POS channel	16
Online / Offline	: 💿 Online 🔵 Offline		
Activate type:	: 💿 Activate 🕒 Transfer		
	Enter license:		
	Import license file:		
	Activate		

Item / Setting / Option	Description	Default
Select	Selects a license.	
SN	Delivers a license's serial number.	
Туре	Delivers the license type.	
Channel	Delivers the total license quantity of SN.	
Online/Offline	 Sets how to active/transfer license, online or offline. Select Online to activate/transfer the license online, which requires the computer to connect to the Internet. Select Offline to activate/transfer the license offline. 	Online
Activate type	 Sets what to do with the license, to activate or to transfer it. Select Activate to activate the license Select Transfer to transfer the license to other servers. 	Activate
Input license	 The license key should be manually entered here. This option is only available when you are "activating" the license "online" (, which means Online is selected for Online / Offline setting and Activate is selected for Activate type setting). 	
Import license file	 Click the ellipsis () button to browse for the license file. This option is only available when you are "activating" the license "online" (, which means Online is selected for Online / Offline setting and Activate is selected for Activate type setting). 	
Step 1: Export offine pack folder	 Exports the server information file to the local disk. Click the ellipsis () button to browse where to export the server information file. Click the Export button to export the server information file. This option is only available when you are "activating" the license "offline" (, which means Offline is selected for Online / Offline setting and Activate is selected for Activate type setting). 	
Step 2: Copy exported offline.req to a PC	 This is a line of guide rather than a setting. Please copy the offline.req that is exported in Step 1 to a computer that is connected to the Internet, and run the License Management Tool to activate the license and get the offline license file. This line of guide is only available when you are "activating" the license "offline" (, which means Offline is selected for Online / Offline setting and Activate is selected for Activate type setting). 	
Step 3: Import license file	Imports the offline license file that is obtained in Step 2 .	

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	 This option is only available when you are "activating" the license "offline" (, which means Offline is selected for Online / Offline setting and Activate is selected for Activate type setting). Click the Activate button to run the activation. 	
Activate button	Runs the activation.	
Transfer button	Runs the transfer.	

	Before transferring licenses, please disable the devices to have sufficient available license to transfer.
	The maximum number of camera licenses per recording server is 64CH. If there has
\mathbf{O}	been 63 ch camera enabled, and then add 4 ch licenses, only one camera will be
	enabled and the remaining 3ch will be disabled.

10.1.1.2.1. Online License Activate

If the server computer is "online" (, which means it is connected to the Internet), activate the license online by the following guide:

- Open the License tabbed page for the Management Server as described in License.
- 2. Select Online for the Online/Offline setting.
- 3. Select Activate for the Activate type setting.
- 4. Select Input license and enter the license key in the field.

OR

Select **Import license** file and click the ellipsis (...) button to browse for the license file to import.

Click the Activate button.
 The license will be activated on the server computer if the license key is effective.

10.1.1.2.2. Offline License Activate

If the server computer is "offline" (, which means it isn't connected to the Internet), activate the license offline by the following guide:

 Open the License tabbed page for the Management Server as described as described in <u>License</u>.

Select Offline for the Online/Offline setting.

- 2. Select Activate for the Activate type setting.
- 3. Click the ellipsis (...) button besides the **Step 1: Export offline pack folder** field to browse for the directory to export the server information file to.
- Click the Export button.
 The server information file is exported the directory assigned.
- 5. Select **Import license** file and click the ellipsis (...) button to browse for the license file to import.
- 6. Copy the offline.req that is exported in **step 6** to a computer that is connected to the Internet.
- Run the OfflineTool.exe on that computer. The Offline Tool launches.
- 8. Enter the serial number or import the serial number file.

nformation:		
Activate new SN.		
Please input SN:		
Input type		
SN:		
	1	î,
C SN file:		

9. Click the **Activate** button.

The license is activated and an offline license file is generated on that computer.

- 10. Copy the offline license file back to the server computer.
- 11. On the server computer, re-open the **License** tabbed page for the **Management Server** as described as described in <u>License</u> if it hasn't been opened.
- 12. Select **Offline** for the **Online/Offline** setting, and select **Activate** for the **Activate type** setting if they haven't been selected yet.
- 13. Click the ellipsis (...) button besides the **Step 3: Import license file** field to browse for the offline license file on the server computer.
- 14. Click the **Activate** button.

The license will be activated on the server computer.

10.1.1.2.3. Online License Transfer

If the server computer is "online" (, which means it is connected to the Internet), transfer the license to other computer by an online manner by the following guide:

- Open the License tabbed page for the Management Server as described in License.
- 2. Select Online for the Online/Offline setting.
- 3. Select Transfer for the Activate type setting.
- 4. Click the Transfer button.

The license will be transferred as "OffLineTool.reg" file.



If user only finish step 1 to 4 (only click "Export" on license manage page, but not take the "OffLineTool.reg" to another computer, then transfer online), this license will still be transferred from the original Crystal Titan, but can't be used by anther Crystal Titan.

10.1.1.2.4. Offline License Transfer

If the server computer is "offline" (, which means it isn't connected to the Internet), transfer the license to other computer with an offline manner by the following guide:

- 1. Open the License tabbed page for the Management Server as described in License.
- 2. Select Offline for the Online/Offline setting.
- 3. Select Transfer for the Activate type setting.
- 4. Click the **Transfer** button.
- 5. Save the request file that is generated.
- 6. Copy the request file generated in **step5** to some other computer that is connected to the internet.
- 7. Run the OfflineTool.exe on that computer.
- 8. The **Offline Tool** launches.
- 9. Click the serial number and click the **Transfer** button.
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Z	Off Line Tool	X
	Information:	
	Transfer activated SN.	
	Transfer SN:	
	5A71-D23C-09E1-7422	
		~
	Transfer	

The license will be transferred as "OffLineTool.reg" file.



If user only finish step 1 to 4 (only click "Export" on license manage page, but not take the "OffLineTool.reg" to another computer, then transfer online), this license will still be transferred from the original Crystal Titan, but can't be used by another Crystal Titan.

10.1.1.3. Server Overview

It relies on the Server Overview tabbed page to get a general view of all the Management Server's networked servers, including Recording Server, Metadata Server and Matrix.

To access the Server Overview tabbed page that configures the Management Server:

1. From the Tree Console, click the topic Management Server.

The **Properties** tabbed page then opens in the **Configuration Pane**.

	The Properties tabbed page opens in the Configuration Pane to configure the Management Server .
* *	Live View Playback Config
Management Server Recording Server Recording Server Recording Server Recording Server 1 Redadata Server 1 Metadata Server 2 Metadata Server 2 Metadata Server 4 Metadata Server 4 Matrix Metadata Server 4 Matrix 1 Matrix 2	Properties License Server Overview Client Overview SMTP Address Book Event Action Name: Management Server Image: Management Server Image: Management Server Image: Management Server Description: Image: Management Server Image: Management Server Image: Management Server Volume: Volume A Image: Management Server Image: Management Server Choose configuration: Image: Current system configuration (Management Server 1 1 0.0.1)

2. Click the Server Overview tab.

The **Server Overview** tabbed page then opens in the **Configuration Pane** showing an overview of all the **Management Server**'s networked servers, including **Recording Server**, **Metadata Server** and **Matrix**.

							rview tabbed page opens in on Pane.
•				ive View	Playback	Config	_ & ×
I	□ 🛃 Management Server □ 🛱 Recording Server □ 🛍 Recording Server 2		se <mark>Serv</mark>	er Overview		SMTP Addres	s Book Event Action
X		Failover / Link Status	Name	Service	LAN Address 1	LAN Address 2	WAN Address
			Record	Recordin	192.168.1.2.5252	192.168.10.2:5252	140.112.112.2.5252
			Record	Recordin	192.168.1.4:5254	192.168.10.4:5254	140.112.112.4:5254
. 👁			Record	Recordin	192.168.1.1:5251	192.168.10.1:5251	140.112.112.1:5251
			Record	Recordin	192.168.1.3:5253	192.168.10.3:5253	140.112.112.3:5253
			Metada	Metadata	192.168.2.1:5270	192.168.2.2.5270	140.112.1.2.5270
			Metada	Metadata	192.168.2.3:5270	192.168.2.4:5270	140.112.2.3:5270
			Metada	Metadata	192.168.2.5:5270	192.168.2.6:5270	140.112.1.4:5270
		Ø	Metada	Metadata	192.168.2.7:5270	192.168.2.8:5270	140.112.1.5:5270

Take the closer look at the overview table. Each column delivers the following info:

Setting	Description				
	Delivers the server's failover or connection status:				
	lcon	on Description			
Failover/Link Status	I	The server is connected with the Management Server.			
	8	The server is disconnected from the Management Server .			
Name	Delivers the name of the server.				
Service	Delivers the service that the server provides.				
LAN Address 1	 Delivers the server's LAN port 1's currently networked IP address. If the LAN port isn't in use, the networking status isn't available. 				
LAN Address 2	 Delivers the server's LAN port 2's currently networked IP address. If the LAN port isn't in use, the networking status isn't available. 				
WAN Address	Delivers the server's WAN address.If the WAN isn't in use, the networking status isn't available.				

10.1.1.4. Client Overview

It relies on the **Client Overview** tabbed page to get a general view of all the clients connected to the **Management Server**.

To access the **Client Overview** tabbed page that configures the **Management Server**:

1. From the Tree Console, click the topic Management Server.

The Properties tabbed page then opens in the Configuration Pane.

	The Properties tabbed page opens in the Configuration Pane to configure the Management Server .
	_ & ×
	Live View Playback Config
Image: Severity of the severity	3 License Server Overview Client Overview SMTP Address Book Event Action Name: Management Server Description:

2. Click the **Client Overview** tab.

The **Client Overview** tabbed page then opens at the **Configuration Pane** showing an overview of all the client(s) connected to the **Management Server** at the moment, including **NuClient** and mobile client(s), which streams videos with lower fps.

* *				_ 공 X
	□ B. Recording Server □ B. Recording Server □ B. Recording Server 4 □ B. Recording Server 4 □ B. Recording Server 1 □ B. Recording Server 3	Properties		Server Oveniew Client Ovenieu
	Metadata Server	Application	User	P
	a 🌸 Metadata Server 1 a 🛊 Metadata Server 2			
	Metadata Server 3 Metadata Server 4	Mobile Client	Client 1	81.184.120.148
	Matrix	NuClient	Client 2	139.213.21.62
	··· 🛃 Matrix 1 ··· 🛃 Matrix 2	Mobile Client	Client 3	230.95.242.149
		Mobile Client	Client 4	190.200.127.249
		NuClient	Client 5	13.169.196.205
		Mobile Client	Client 6	81.4.38.179
		Mobile Client	Client 7	53.184.122.197
		Mobile Client	Client 8	52.77.45.174
		NuClient	Client 9	63.104.107.168
		NuClient	Client	22.122.132.210

The **Client Overview** tabbed page opens in the **Configuration Pane**.

Take the closer look at the overview table. Each column delivers the following info:

Icon / Item	Description		
C Refreshes the connected client(s).			
Application	Delivers the client's application type.		
User	Shows the user(s) using the application at the moment.		
IP	Delivers the IP address by which the client is connected to the Management Server.		

10.1.1.5. SMTP

It relies on the **SMTP** tabbed page to set up the "Simple Mail Transfer Protocol" for the **Management Server** to send out emails.

To access the SMTP tabbed page for the Management Server:

1. From the Tree Console, click the topic Management Server.

The **Properties** tabbed page then opens in the **Configuration Pane**.

		The Properties tabbed page opens in the Configuration Pane to configure the Management Server .
€ ب		Live View Playback Config
	□ ■ Recording Server □ ■ Recording Server 2 □ ■ Recording Server 4 □ ■ Recording Server 4 □ ■ Recording Server 4 □ ■ Recording Server 3 □ ■ Metadata Server 1 □ ★ Metadata Server 1 □ ★ Metadata Server 3 □ ★ Metadata Server 3 □ ★ Metadata Server 4 ● ★ <t< td=""><td>Properties License Server Overview Client Overview SMTP Address Book Event Action Name: Management Server Image: Management Server Image: Management Server Image: Management Server Description: Image: Management Server Image: Management Server Image: Management Server Volume: Volume: Volume: Volume A Image: Management Server Image: Management Server 1 1.0.0.1) Choose configuration: Image: Apply target volume configuration (Management Server 1 1.0.0.1) Image: Management Server 1 1.0.0.1)</td></t<>	Properties License Server Overview Client Overview SMTP Address Book Event Action Name: Management Server Image: Management Server Image: Management Server Image: Management Server Description: Image: Management Server Image: Management Server Image: Management Server Volume: Volume: Volume: Volume A Image: Management Server Image: Management Server 1 1.0.0.1) Choose configuration: Image: Apply target volume configuration (Management Server 1 1.0.0.1) Image: Management Server 1 1.0.0.1)

2.Click the **SMTP** tab.

The **SMTP** tabbed page then opens at the **Configuration Pane**.

The **SMTP** tabbed page opens in the **Configuration Pane**.

			_ & ×
€ •	r r r	Live View Playback Cont	
	Management Server Recording Server 2 Recording Server 4 Recording Server 4 Recording Server 1 Recording Server 1 Recording Server 3 Metadata Server 1 Metadata Server 2 Metadata Server 2 Metadata Server 2 Metadata Server 4 Matrix 1 Matrix 1 Matrix 2	Properties License Server Overview Client Overview SMIP Address Book Event Action SIITP server Port 25 E-mail sender: E-mail content	
		SMTP server authentication: Enable	
		User account	
		Password:	
		Enable SSL: Enable	
		Send test E-mail: 🖂	

The featured settings on the **SMTP** tabbed page are:

Setting	Description	Default
SMTP server	Sets the SMTP server's IP address or server name.	
Port	Assigns the port number. Click the icon to recover the default.	25
E-mail sender	Sets the sender's Email address.	
E-mail subject	Defines a subject for all the Emails sent.	
E-mail content	Enters the Email content.	
SMTP server authentication	Enables/disables the username/password authentication before an Email is sent.	Deselected (Disabled)
User account	Sets up the username for SMTP authentication.	
Password	Sets up the password for SMTP authentication.	
Enable SSL	Enables/disables Secure Sockets Layer.	Deselected (Disabled)
Send test E-mail	 Makes the Management Server send a test Email to the sender to make sure the function works. ▶ Click the ⊠ icon to send the test Email. 	

10.1.1.6. Address Book

It relies on the **Address Book** tabbed page to set up the emails to receive the **Management Server**'s notifications for the configured camera events, input events and system events.

To access the Address Book tabbed page for the Management Server:

1. From the Tree Console, click the topic Management Server.

The **Properties** tabbed page then opens in the **Configuration Pane**.

	The Properties tabbed page opens in the Configuration Pane to configure the Management Server .
	_ 라 ×
Management Server Recording Server Recording Server Recording Server Recording Server 1 Recording Server 3 Metadata Server 1 Metadata Server 2 Metadata Server 1 Metadata Server 1	Properties License Server Overview Client Overview SMTP Address Book Event Action Name Management Server Description. Volume Volume A volume: Volume A Choose configuration: • Current system configuration Apply target volume configuration (Management Server 1 1.0.0.1)

2. Click the Address Book tab.

The **Address Book** tabbed page then opens in the **Configuration Pane** showing an overview of all the emails set up as well as some settings.

The Address Book tab	bed page opens in the
Configuration Pane.	

•	* *			Live View Playback Contig
	□ Management Server □ PL Recording Server □ PL Recording Server 2 □ PL Recording Server 4			Server Overview Client Overview SMTP Address dook Event Action
₩	🖽 🛃 Recording Server 1	Name 🖉	Mail Address 🖉	Phone 🥒
×	B. Recording Server 3 Metadata Server Metadata Server Metadata Server 1 Metadata Server 2 Metadata Server 3	Cardy	xa@aax xa	7871234567
		Fred	xa@aax xa	89798456
		OutRu	xal@aax.xa	1234567
	🗉 🏚 Metadata Server 4 🖂 🕼 Matrix	Cardy	xa@aax.xa	1234567
	A strix 1			

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Each column of the overview table delivers the following info:

Item Description	
Name	Delivers the name of the contact.
Mail Address	Delivers the email address of the contact
Phone	Delivers the phone number of the contact

The featured settings are:

lcon	Description	
+	Adds a new contact.	
 Deletes the selected contact. Click any of the contact info to select the contact. 		
	 Edits the selected contact. Click any of the contact info to edit the info. 	

10.1.1.7. Event Action

It relies on the **Event Action** tabbed page to enable/disable the event(s) that will launch action(s) from the **Management Server**, including the server abnormality such as exhausted disk space and the failure to write to the disk drive.

To access the **Event Action** tabbed page for the **Management Server**:

1. From the Tree Console, click the topic Management Server.

The **Properties** tabbed page then opens in the **Configuration Pane**.

		The Properties tabbed page opens in the Configuration Pane to configure the Management Server .
€ ب		Live View Playback Config
	□ ■ Recording Server □ ■ Recording Server 2 □ ■ Recording Server 4 □ ■ Recording Server 4 □ ■ Recording Server 3 □ ■ Metadata Server 1 □ ★ Metadata Server 1 □ ★ Metadata Server 1 □ ★ Metadata Server 3 □ ★ Metadata Server 4 ■ ★ Metadata Server 4 ■ ₩ Matrix 1 ■ ₩ Matrix 2	Properties License Server Overview Client Overview SMTP Address Book Event Action Name: Management Server Image: Compare the server

2. Click the **Event Action** tab.

The Event Action tabbed page then opens in the Configuration Pane.

The Event Action tabbed page opens in the Configuration Pane.

	_ 8 ×
et 🕫 🔨 🕲	Live View Playback Config
Image: Sever Image: Sever Image: Sever Image: Sever	Pioperties License Server Overview Client Overview SMTP Address Book Event Action Event Event Name Schedule Stop Related Action I Sec I Action List + - /

The featured settings are:

Group	Icon / Setting	Description	
	–	Adds an event.	
	Т	Available events is Fail to write to drive .	
	_	 Deletes the selected event. Click any of the event info cells to select the event. 	
		Edits the selected event. Click any of the event info cells to edit the info.	
	G	Copies the event setting to another networked device.	
	Event Name	Delivers the name of the event.Click the Event Name cell to edit the name of the event.	
Event	Event	Delivers the event type. Fail to write to drive.	
	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>. 	
	Stop Related Action	Stop action on NuClient including Video Edge Display and Play Alert Sound.	
	Sec.	Sets when to stop the related action launched by the Management Server after the event occurs. 1 to 60 seconds are configurable.	
	Action List	 Delivers all the actions set up for the Management Server to take when the event occurs. The available actions are Fail to write to drive. 	
	+	 Adds a schedule. Available options are the schedules created as described in <u>Cr</u> <u>A Schedule</u>. 	
	_	Deletes the selected schedule . Click a schedule to select it.	
	۲	Edits the selected schedule . Click a schedule to select it.	
	Ť	Moves the selected schedule up. Click a schedule to select it. 	
Add schedule	Ŧ	Moves the selected schedule down. Click a schedule to select it. 	
	题	Opens a schedule overview dialog that shows the applied schedule(s in a daily view or a weekly view.	
	G	Copies the schedule setting to another event.	
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to som other schedule. 	
	Property	Sets whether to allow or block the applied schedule 's time period(s).	
	Description	Delivers a brief description for this schedule for the easier identification of it.	
Add	Action List	 Delivers all the actions set up for the Management Server to take when the event occurs. Available actions are E-Mail to multiple and Play alert sound. 	
action	+	Adds an action for the Management Server to take when the event occurs. Two actions are available: E-Mail to multiple and Play alert sound .	

-	Deletes the selected action.Click an action to select it.	
E-Mail to Multiple	Click this setting to open a group of Action properties settings to set whom to send alert emails to.	
Play alert sound	Play Alert Sound on NuClient. Please enable Audio Notification on Global Client Configuration Function Alarm	

10.1.2. Configure Recording Server

A **Recording Server** is a server right under the control of the **Management Server** to control one or more "video device(s)" that further controls one or more camera(s) or camera DI/DO.

To access the setting of a Recording Server:

1. Access the **Physical Config** ("physical configuration") as described in <u>Physical</u> <u>Config (Management Server)</u>.

The physical configuration opens onscreen, and the **Tree Console** shows the three sub settings: **Recording Server**, **Metadata Server**, and **Matrix**.



If a plus sign (+) shows besides the sub topic Recording Server, click the plus sign (+) to collapse the existing Recording Server(s). Then click the Recording Server to configure.

OR

If a minus sign (-) shows besides the sub topic **Recording Server**, the existing **Recording Server**(s) collapse already. Simply click the **Recording Server** to configure.

The **Properties** tabbed page then opens at the **Configuration Pane** to configure the selected **Recording Server** while the other five tabbed pages are hidden.

	The Properties tabbed page opens in the Configuration Pane to configure the selected recording server .
*	Live View Playback Config
Management Server B & Management Server B & Recording Server B & Recording Server 2	Propent Device Overview Volume Group Recording Schedule Auto Backup Event Action
Recording Server 4 Recording Server 1 Recording Server 3 Recording Server 3	Recording Server. 💌 Enable Name: Recording Server 2
Metadata Server 1 Metadata Server 2 Metadata Server 2	Description: Recording Server 2 description
P P Metadata Server 3 P P Metadata Server 4 P Matrix Matrix	Address: LAN/IWAN Address

3. Access one of these tabbed pages to configure the **Recording Server**.

Tab	Description		
Properties	 Enables/disables the Recording Server. Enters a brief description of the Recording Server for the better identification of it. Launches an application to detect and install the available cameras within the network. See Properties for the settings. 		
Device Overview	Delivers a general view of the cameras connected to the Recording Server .		
Volume Group Allocates the RAID disk volume for a camera to save the videos to.(One or more disk drives are working for the Reserver as a logical drive.) Volume Group Video recording requires a volume. For RAID setting please go to Web Setting			
Recording Schedule Delivers a general view of the video recording schedules of all video devices (i.e. cameras) connected to a Recording Server See Schedule to set the video recording schedule.			
Auto Backup	 Manages the backup for the videos recorded on the selected period. The Auto Backup requires two major settings, one is the backup schedule and the other is FTP server setting. 		
Event Action	Sets the events to alarm for the Recording Server .		

A function overview of these tabbed pages:

10.1.2.1. Properties

It relies on the **Properties** tabbed page to enter the information about the **Recording Server** including the name and description, or to launch the install wizard.

To access the **Properties** tabbed page of the **Recording Server** to configure:

1. From the Tree Console, click the topic Recording Server.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

The Properties tabbed page opens in the Configuration Pane to configure the selected recording server.

The featured settings on the **Properties** tabbed page are:

Setting	Description	Default	
Enable	Enables/disable	Selected (Enabled)	
Name	Names the Rec	ording Server.	"Recording Server #"
Description	Provides a brie easier identifica	"Recording Server # description"	
	Delivers the foll	owing addresses:	
	ress LAN1	Description	
Address		 Delivers the server's LAN port 1's currently networked IP address. If the LAN port isn't in use, the networking status isn't available. 	
		 Delivers the server's LAN port 2's currently networked IP address. If the LAN port isn't in use, the networking status isn't available. 	
	WAN	Delivers the server's WAN address. If the WAN isn't in use, the networking	

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	status isn't available.		
Version			
Device pack version	The version of device pack		
Time zone	The time zone of Recording Server		
LaunchInstallLaunches an application to detect and configure Crystal TitanWizardwithin the network.			

10.1.2.2. Device Overview

It relies on the **Device Overview** tabbed page to get a general view of all the physical devices connected to the **Recording Server**, including the **video devices** and **IO devices**.

To access the **Device Overview** tabbed page that configures the **Recording Server**:

1. From the **Tree Console**, click the topic **Recording Server**.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

_					d page opens in the Configuration selected recording server .
•	e, :9		10	ve View Playback	_ d' X
	AvR Management Server B. Recording Server B. Recording Server C. A. Market Server C. A. Market Server C. B. MAR, Market Server D. B. Make POS C. B. Market Server D. Marke	Recording Server: Name: Description: Live view maximum connections: Address: Version: Device pack version:	Enable ENAR Records ENAR Records 128 LAN / WAN LAN 1 LAN 2 WAN 20.0 02 16 0000 00 UTC + 06:00	ng Berver Address 192 168 5 58 5251 192 168 1.99 5251 220 132 124 68 9208 213	Auto Backup ^{III} Event Action

2. Click the **Device Overview** tab.

The **Device Overview** tabbed page then opens.

_								abbed page opens in the Configuration elected recording server .
ي ح	et 10			Live Vie	W P	layback	Config	
	If IV/R Management Server If IV/R Management Server If IV/R Recording Server If IV/R Recording Server If IV/R Recording Server If IV/R Volumentation If IV/R Statute If IV/R Statute If IV/R Recording Server If IV/R Statute If IV/R Recording Server Iv/R Recording Se	Propert Search Vid Video Devi Enable Enable	leo Devices: 🔎	P Volume Group 192 168.1.41 192 168.1.41	Port 64488 11088 12088	g Schedule Brand Arecont Arecont	Auto Backup Even Model Av5105 Av5105 Av5105	t Action Account admin admin admin
	🦥 🔐 NuMatrix B		Hall (1.3M)	192.168.1.41	39088	Arecont	AV5105	admin
		•	Vito Supermarket	192.168.1.41	42088	Arecont	AV5105	admin
			Stairway Matrix	192.168.1.41	64788 80	Arecont	AV5105 SNC-CH220	admin
		NO Device		P	Port	Model	Address ID	

The featured settings on the **Device Overview** tabbed page are:

Group	Setting	Description	Default
Search Video	Devices 🔎	Opens a Search Video Devices dialog to search for the available video devices to add them to the Recording Server.	
		Select the drop-downs All, None or Invert to select all video devices, deselect all video devices or reverse the selection.	All (All video devices are selected.)
	Enable	Enables/disables the video device .	Selected (Enabled)
	Name	 Delivers the name of the video device. See <u>Properties</u> to know how to set the name for the video device. 	
Video Device List	IP	 Delivers the IP address of the video device. See Properties to know how to set the IP address for the video device. 	
	Port	 Delivers the port of the video device. See Properties to know how to set the port for the video device. 	
	Brand	 Delivers the brand of the video device. See <u>Properties</u> to know how to set the brand for the video device. 	
	Model	Delivers the model name of the video device . See <u>Properties</u> to know how to set the model	

		name for the video device .	
	Account Video device user account display		
		Select the drop-downs All , None or Invert to select all devices, deselect all devices or reverse the selection.	All (All devices are selected.)
	Enable Enables/disables the I/O device .		Selected (Enabled)
I/O Device List	Name	Delivers the name of the I/O device .	
	IP	Delivers the IP address of the I/O device.	
	Port	Delivers the port of the I/O device .	
	Model	Delivers the model name of the I/O device .	
	Address ID	I/O device address ID display	

10.1.2.3. Volume Group

It relies on the **Volume Group** tabbed page to allocate the RAID disk volume for a camera to save the recorded videos to. (One or more disk drives are working for the Recording Server as a logical drive.) The volume is required for video recording.

To access the Volume Group tabbed page that configures the Recording Server:

1. From the **Tree Console**, click the topic **Recording Server**.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

• •	et 2		ne to		ed page opens in the Configuration e selected recording server .
	G. MRR Management Server G. MRR Necostan Barver G. TARE Recording Server G. Reception Counting Timmeniation Counting Kind Statement G. Matrix G. Matrix	Recording Server: Name: Description: Live view maximum connections: Address: Version: Device pack version:	Enable Event Event	Address 192, 198, 5, 28, 2251 192, 198, 5, 28, 2251 220, 132, 124, 68, 9208 213	Auto Bachop" Event Action

2. Click the Volume Group tab.

The Volume Group tabbed page then open.
The Volume Group tabbed page open.
The Volume Group tabbe

Take a closer look at the user interface. The **Volume Group** tabbed page actually shows all the existing **volume group(s)**, with the info about the allocated disk volume(s).



The video device(s) that is accessing the disk volume.

10.1.2.4. Recording Schedule

It relies on the **Recording Schedule** tabbed page to get a general view of the video recording schedules of all the video devices (i.e. cameras) connected to a **Recording Server**.

To access the **Recording Schedule** tabbed page that configures the **Recording Server**:

1. From the Tree Console, click the topic Recording Server.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

The Properties tabbed page opens in the Configuration Pane to configure the selected recording server.

2. Click the Recording Schedule tab.

The **Recording Schedule** tabbed page then opens.

The **Recording Schedule** tabbed page opens in the **Configuration Pane** to configure the selected **Recording Server**.

() v <i>p p</i>	Live View Playbac Config	_ & ×
Anasgement Server Anasgement Server Anacording Server	Proparties Device Overview Volume Group Receipting Scheduler Auto Bachup Event Action	
	Sandar 06 81 62 83 66 67 66 68 16 11 12 13 16 15 16 17 18 18 28 21 22 22 22 23 16 15 16 17 16 18 28 21 22 22 2 24 24 25 25 25 25 22 22 2 2 24 26 27 22 2 2 24 25 26 27 22 2 2 24 25 26 27 22 2 2 2 26 27 26 27 22 2 26 26 26 27 28 26 27 28 27 28 26 27 28 26 26 27 28 26 26 27 28 26 26 27 28 26 <th26< th=""> <th27< th=""> <th26< th=""></th26<></th27<></th26<>	Recycle condition (days) 7 7 7 7 7 7 7
i III 22 Motadata Server 4 III 20 M Mattix 	Aways - On Event - Boosting	م م + +

The featured settings on the **Recording Schedule** tabbed page are:

Setting / Item	Description
	Switches the schedule table to any other calendar day.
schedule table	Click and drag on the schedule table to view other time slots.
	Search the keyword of schedule
+	Focuses on the previous searched result.
+	Focuses on the next searched result.
Always	 Delivers the times slots in which the video recording is on unconditionally. See <u>Add A Schedule</u> to know how to change the setting.
On Event	 Delivers the times slots in which the video recording is on when an event occurs. See <u>Add A Schedule</u> to know how to change the setting.
Boosting	 Delivers the times slots in which the video are recorded with higher frame rate. See <u>Add A Schedule</u> to know how to change the setting.
+	Scrolls the schedule table to the left.
⇒	Scrolls the schedule table to the right.
م	Zooms out the daily time schedule table to bring more time slots into view.
Q	Zooms in the schedule table to view the time slots in a more specific way.
Recycle condition	Delivers how long to keep the recorded videos for.

10.1.2.5. Auto Backup

It relies on the **Auto Backup** tabbed page to auto back up the videos recorded on the previous day to a FTP server. For such auto backup, it requires the backup schedule setting and the FTP server setting.

To access the Auto Backup tabbed page that configures the Recording Server:

1. From the **Tree Console**, click the topic **Recording Server**.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

				bed page opens in the Configuration the selected recording server .
et \$ ≺ ©		U	ve View Playback	Config
NVR Management Server Se	Recording Senee: Name: Description: Live view maximum connections: Address: Version: Device pack version:	Enable FeVR Record 128 128 LAN / WAN LAN 1 LAN 2 WAN 20.0 02 16 0000 00 UTC + 08:00	ng Berver Address 192 169 5 5 6 551 192 168 1 59 5251 220 132 124 66 9208 213	F Addo Blachupy "Event Action (0-256)

2. Click the Auto Backup tab.

The **Auto Backup** tabbed page then opens.

The Auto Backup tabbed page opens in the Configuration Pane to configure the selected recording

• چ	**	Live View Playback Config 1
	Recording Server 4 G & Video Device 1 G & Video Device 2 G & Video Device 2	Properties Device Overview Volume Group Recording Schedule Auto Backupi Event Action Auto backup: Cable FTP host 192:168:1.101 FTP port 21 User name: Eadmin Password: ••••• Backup folder: (Recording tlackup)
		Daily backup period from: (09:30:00)

The featured settings on the **Auto Backup** tabbed page are:

Group	Setting	Description	Default
Auto backup: 🗹	Enable	Enables/disables the auto backup feature for the Recording Server .	Disabled
	FTP host	Sets the IP address or server name of the backup FTP server.	
	FTP port	Sets the port number of the backup server.	
	User name	Enters the username to log in the backup FTP server.	
FTP server setting	Password	Enters the password to log in the backup FTP server.	
Sound	Backup folder	 Specifies the folder to save the backup data to. The folder name should be the format of "Folder Name", "Folder Name/Sub Folder Name" and so on. 	
	I	Runs a connection test to the configured FTP server.	
	Daily backup time	Sets the daily time for the system to do the auto backup.	0:00:00
Backup schedule	Backup period from	Sets the start time of recorded video of the previous day.	0:00:00
setting	Backup period to	Sets the end time of recorded video of the previous day.	23:59:59
	Cameras	Sets the channel(s) to back up the videos for.	Deselected.

10.1.2.6. Event Action

It relies on the **Event Action** tabbed page to enable/disable the event(s) that will launch action(s) from the **Recording Server**, including the server abnormality such as server disconnection or the failure to write to the disk drive.

To access the **Event Action** tabbed page for the **Recording Server**:

1. From the Tree Console, click the topic Recording Server.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

The Properties tabbed page opens in the Configuration Due to configure the selected recording server.

2. Click the Event Action tab.

The **Event Action** tabbed page then opens.

The **Event Action** tabbed page opens in the **Configuration Pane** to configure the selected **recording server**.

• چ	<u>ت ہ</u>	Live View Playback Config
	田 低 Reception 日 低 Counting 日 低 Immervision	Properties Device Overview Velume Group Recording Schedule Auto Backup Event Action Event Event Name Schedule Stop Related Action I Sec. Action List
?	A A (1.5 Supermarket A (1.5 Supermarket	+ - ≠ G

Group	Icon / Setting	Description		
	+	 Adds an event. Available events are Server disconnect, Fail to write to drive and Auto backup failed. 		
	—	Deletes the selected event.Click any of the event info cells to select the event.		
	۲	Edits the selected event. Click any of the event info cells to edit the info.		
	G.	Copies the event setting to another device .		
	Event Name	Delivers the name of the event.Click the Event Name cell to edit the name of the event.		
Event	Event	 Delivers the event type. Four types are available: Server disconnect, Fail to write to drive and Auto backup fail. 		
	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>. 		
	Stop Related Action	Stop action afterSec.		
	Sec.	Sets when to stop the action launched by the Recording Server after the event occurs. 1 to 60 seconds are configurable.		
	Action list	 Delivers all the actions set up for the Recording Server to take when the event occurs. The available action is E-Mail to multiple and play alter sound. 		
	+	 Adds a schedule. Available options are the schedules created as described in Create A Schedule. 		
	_	Deletes the selected schedule . Click a schedule to select it. 		
	۲	Edits the selected schedule . Click a schedule to select it. 		
	Ť	Moves the selected schedule up. Click a schedule to select it. 		
Add schedule	Ŧ	Moves the selected schedule down. Click a schedule to select it. 		
	髝	Opens a schedule overview dialog that shows the applied schedule(s) in a daily view or a weekly view.		
	G	Copies the schedule setting to another event.		
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule. 		
	Property	Sets whether to allow or block the applied schedule 's time period(s).		
	Description	Delivers a brief description for this schedule for the easier identification of it.		
Add action	Action List	Delivers all the actions set up for the Recording Server to take when		

The featured settings on the Event Action tabbed page are:

		 the event occurs. The available action is E-Mail to multiple and play alter sound
	+	 Adds an action for the Recording Server to take when the event occurs. The available action is E-Mail to multiple and play alter sound
	—	Deletes the selected action.Click an action to select it.
Action properties		 Sets whom to send the alert email(s) to. This group of settings is available only when the E-Mail to multiple action is added.

10.1.2.7. Add A Video Device / IO Device

To add a video device or IO device to a Recording Server:

- 1. From the Tree Console, click the topic Recording Server.
- If a plus sign (+) shows besides the sub topic Recording Server, click the plus sign (+) to collapse the existing Recording Server(s). Then click the Recording Server to configure.

OR

If a minus sign (-) shows besides the sub topic **Recording Server**, the existing **Recording Server**(s) collapse already. Simply click the **Recording Server** to configure. Click the **Recording Server** to add the **video device** or **IO device** to.

The Recording Server becomes highlighted.

3. From the bottom of the **Tree Console**, click the add icon +.

A tiny dialog then opens showing the options of **Add Video Device** and **Add IO Device**.

Add Video Device Add IO Device

4. Click Add Video Device to add a video device.

OR

Click Add IO Device to add an I/O device.

A new video device, named "video device" by default, or a new I/O device, named "io device" by default", will be appended under the selected Recording Server, and a Properties tabbed page will open in the Configuration Pane for users to configure the newly added video device or I/O device. The new video device or I/O device is appended to the recording server.

		The P Pane.	· ·	tabbed page opens in the Configuration
• چ	* *			Live View Playback Config
	□ ∰ Recording S v □ ∰ Recording S □ ঊ Video D	ce 2	Properties Video Device: Name: Description:	Camera 2 Enable Video Gevice
	☐ Participation Control Co	levice 1 levice 2 ce 1		80
	E 🛱 Recording	Server 1	Account: Password:	admin

To configure a **video device**, see <u>Configure A Video Device</u>. To configure an **IO device**, see <u>Configure An IO Device</u>.

10.1.2.8. Delete A Video Device / IO Device

To delete a video device or IO device from a Recording Server:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the Recording Server to delete the video device or I/O device from.

The Recording Server becomes highlighted

3. If a plus sign (+) shows besides the **Recording Server**, click the plus sign (+) to collapse the existing **video device**(s) and **IO device**(s). Then click the device to delete.

OR

If a minus sign (-) shows besides the **Recording Server**, the existing **video device(s)** and **IO device(s)** collapse already. Simply click the device to delete.

The device to delete becomes highlighted.

4. From the bottom of the Tree Console, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.



- 5. Click **Yes** to confirm the deletion.
- 6. Click the **apply button** on the **Top Toolbar** to apply the change.

10.1.2.9. Configure A Video Device

To configure a video device:

- 1. From the Tree Console, click the topic Recording Server.
- If a plus sign (+) shows besides the sub topic Recording Server, click the plus sign (+) to collapse the existing Recording Server(s). Then click the Recording Server to configure.

OR

If a minus sign (-) shows besides the sub topic Recording Server, the existing Recording Server(s) collapse already. Simply click the Recording Server to configure.

3. Click the **Recording Server** to which the **video device** to configure belongs.

The **video device** to configure becomes highlighted and the **Properties** tabbed page opens in the **Configuration Pane** while the **Camera** tabbed page is hidden by default.

		The Properties t Pane .	tabbed page opens in t	he Configuration	
• چ	**		Live View Playback	Config	_ & ×
	& Management Se er B. Recording S ver Construction Server 2 Construction Server 2 Construction Server 2 Construction Server 4 Construction Server	Provers Video Device: Name: Description: URL/IP address: Port: Account Password:	Video device		
	Image: State Sta	Brand: Model:	Please choose one brand Please choose one model TCP UDP HITP) 9	

The video device to configure becomes highlighted.

See <u>Properties</u> for the settings featured on the **Properties** tabbed page. See <u>Camera</u> for the settings featured on the **Camera** tabbed page.

10.1.2.9.1. Properties

It relies on the **Properties** tabbed page to configure the properties of a video device:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the Recording Server to which the video device to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **video device** to configure while the **Camera** tabbed page is hidden by default.

-				
۲ 🌍	e f h		Live View Playback	Config
I	 B Management Server B Recording Server E Recording Server 2 ■ S Video Device 1 	Pro		
X	- Camera 1	Video Device:	🗹 Enable	
	E Camera 2	Name:	video device	
	···· · · · · · · · · · · · · · · · · ·	Description:		
	Recording Server 4	URL/IP address:	127.0.0.1	
	El 💰 Video Device 2	Port	80	
	IO Device 2	Account:	admin	
	⊞ 💰 Video Device 1 ⊞ 💰 Video Device 2	Password:		
	··· 🐉 IO Device 1 ···· 🔐 IO Device 2	Brand:	Please choose one brand •	9
	🖽 🕵 Recording Server 3 🖂 🏚 Metadata Server	Model:	Please choose one model -	
	 Image: Metadata Server 1 Image: Metadata Server 2 	Protocol:	💿 TCP 🔵 UDP 🔵 HTTP	

The Properties tabbed page opens in the Configuration Pane.

The featured settings on the **Properties** tabbed page are:

Group	Description	Default
Video Device 🗹 Enable	Enables/disables the video device .	Selected (Enabled)
Name	Sets the name of the video device.	"video device"
Description	Provides a brief description of the video device for the better identification of it.	
URL/IP address	Sets the URL or IP address of the video device.	127.0.0.1
Port	Sets the port of the video device.	80
Account	Sets the user name to access the video device.	Admin
Password	Sets the password to access the video device.	
Brand	Sets the brand of the video device.	
Model	Sets the model name of the video device.	
Protocol	Sets the protocol of the video device . • Options available are: TCP , UDP and HTTP .	ТСР

10.1.2.9.2. Camera

It relies on the **Camera** tabbed page to view the status of all the video channels controlled by a **video device**.

To access the Camera tabbed page of a video device:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the camera to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **video device** to configure while the **Camera** tabbed page is hidden by default.

The Properties tabbed page opens in the Configuration Pane.

-				
• 😴	A A		Live View Playback	Config
	 B Management Server B Recording Server B Recording Server 2 B ≪ Video Device 1 	Properties		
X	Camera 1	Video Device:	🗹 Enable	
	🖽 💰 Video Device 2	Name:	vídeo device	
	··· Video device ··· # IO Device 1 ··· # IO Device 2 ··· VID Device 2	Description:		
	E Recording Server 4 E Video Device 1	URL/IP address:	127.0.0.1	
	E 💰 Video Device 2	Port	80	
	IO Device 2	Account	admin	
	E 💰 Video Device 1 E 💰 Video Device 2	Password:		
	··· # IO Device 1 ··· @ IO Device 2	Brand:	Please choose one brand 🔹	<u>च</u>
	🗉 🎼 Recording Server 3 🖂 🏚 Metadata Server	Model:	Please choose one model +	
	Metadata Server 1 7 Metadata Server 2	Protocol:	🌒 TCP 🔵 UDP 🔵 HTTP	

4. Click the Camera tab.

The **Camera** tabbed page then opens.

		The Camera ta Pane .	bbed pag	e open:	s in the	Configu	uration				_ & X
•	**			Live View	v Playback	Config					- " ^
	Anagement Server B. Management Server B. Recording Server B. S. Recording Server 2 B. S. Video Device 1	Properties	Camera								
X	🖂 🗝 Camera 1		Camera Name	Stream	Video Format	Frame Rate	Resolution	Quality	Audio	Lens	tamera Po
	명 Camera 2 티 분 Video Device 2 명 Camera 1 명 Camera 2 명 DUDO	Multi Stream Enable Multi Stream	Camera 1	Stream 1	H.264		1280x1024	Standard			
				Stream 2	MJPEG		1280x1024				Ceiling
. @				Stream 3	H264		176x144				
	IO Device 1		Camera 2	Stream 1	H.264		1280x1024	Standard			
	🗉 🚮 Recording Server 4			Stream 2	MJPEG		1280x1024				Ceiling
	표 K Video Device 1 표 K Video Device 2			Stream 3	H264		176x144				

Take a closer look at the tabbed page, which actually shows the statuses of all the camera(s) controlled by the **video device**.

			Liv	e View Pla	yback C	Config					_ & X
	Properties	Camera									
		Camera Name	Stream	Video Format	Frame Rate	Resolution	Quality	Audio	Lens	Lens Type	amera Positio
~	Enable		Stream 1	H.264		full	10(Normal)			ImmerVision IMV1-1/3	none
	Multi	default name	Stream 2	MJPEG	0.5~5	half		al) 🗙			
ľ	Stream		Stream 3	MJPEG	0.1~1	half					

Group	Description			
Enable	Enables/disables the camera .			
Multi stream	Enable/disable the multi stream			
Camera Name	Delivers the name of the camera .			
Stream	Delivers the stream quantity for camera .			
Video Format	Delivers the video format of the camera .			
Frame Rate	Delivers the frame rate of the video.			
Resolution	Delivers the resolution of the video.			
Quality	Delivers the quality of the video.			
Audio	Delivers whether audio is enabled for the camera .			
Lens	Delivers the lens for the camera use.			
Lens Type	Special lens feature, such as fisheye camera.			
Camera Position	Delivers where the camera locates for the special lens feature.			

10.1.2.9.3. Configure A Camera

To configure a camera for the general properties, data streaming, recording schedule and event & action features:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the camera to configure belongs.
- 4. If a plus sign (+) shows besides the **video device**, click the plus sign (+) to collapse all the existing **camera**(s). Then click the **camera** to configure.

OR

If a minus sign (-) shows besides the **video device**, the existing **camera(s)** collapse already. Simply click the **camera** to configure.

The **Properties** tabbed page opens in the **Configuration Pane** for the **camera** to configure while the other tabbed pages are hidden by default.

• چ	**	Live View Playback Config
	○ [®]	Stream Recording Schedule Event Action Camera: Enable Name: Camera 1 Description: Camera 1 Description

The Properties tabbed page opens in the Configuration Pane.

An overview of the tabbed pages featured:

Tabbed Page	Description	
Properties	 Enables/disables the camera. Sets the name and brief description for the camera. 	
Stream	 Enables/disables the stream profile. Configures the camera's stream profile setting. 	
Recording Schedule	 Delivers a general view of the camera's video recording schedule. Configures the camera's video recording schedule and other recording features. 	
Event Action	Sets the event(s) that will launch action(s) from the camera .	
10.1.2.9.3.1. Properties

It relies on the **Properties** tabbed page to configure a camera for the general properties such as the title and a brief description.

To access the **Properties** tabbed page of a camera:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the camera to configure belongs.
- 4. If a plus sign (+) shows besides the **video device**, click the plus sign (+) to collapse all the existing **camera**(s). Then click the **camera** to configure.

OR

If a minus sign (-) shows besides the **video device**, the existing **camera(s)** collapse already. Simply click the **camera** to configure.

The **Properties** tabbed page opens in the **Configuration Pane** for the **camera** to configure while the other tabbed pages are hidden by default.

• چ	* *	Live View Playback Config	_ & X
	August Server August Server August Server 2 August Server 2 August Server 2 August Server 2 Campar 3 Campar 3 Campar 3 Campar 3 August Server 4 B. Recording Server 4 B. Recording Server 4 B. Recording Server 4 B. Recording Server 3 August Server 3 August Server 3 August Server 3 August Server 3	Camera 1 Camera 1 Descriptor: Camera 1 Camera 1 Cam	

The Properties tabbed page opens in the Configuration Pane.

The featured settings on the **Properties** tabbed page are:

Setting	Description	Default
Camera	Enables/disables the camera .	Enable
Name	Names the camera .	Default name
Description	Provides a brief description of the camera for the better identification of it.	

10.1.2.9.3.2. Stream

It relies on the **Stream** tabbed page to configure a camera for the general properties such as the title and a brief description.

To access the **Stream** tabbed page of a camera:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the camera to configure belongs.
- 4. If a plus sign (+) shows besides the **video device**, click the plus sign (+) to collapse all the existing **camera**(**s**). Then click the **camera** to configure.

OR

If a minus sign (-) shows besides the **video device**, the existing **camera**(**s**) collapse already. Simply click the **camera** to configure.

5. Click the Stream tab.

The **Stream** tabbed page opens in the **Configuration Pane** for the **camera** to configure while the other tabbed pages are hidden by default.

• ھ	و: _أ ه		Live View Pisyback Config
I	¹ / ₆ NVR Management Server ¹ / ₆ Recording Server ¹ / ₆ Recording Server	Properties	Bream Recording Schedule Event Action
× *	G & Reception	Stream Profile: 🚽	e Enable
?⊡	default name	Video Format H	H284 •
	田 & Immervision 田 & Hall (1.3M)	Frame Rate: 5	5 •
	 Lito Supermarket Litairway 	Resolution: fu	NI •
	回 & Matrix 回 勝 Metadata Server 日 勝 NVR Metadata Server		10(Normal) •
	□ prover metadata Server □ prover metadata Server □ prover metadata Server	Audio:	Enable Audio
	Matrix Matrix Matrix		Enable
	NuMatrix B		
		Format MJ	LIPFG
		Frame Rate: 0.5	
		Resolution: ha	af
		Format MJ	
		Frame Rate: 0.1 Resolution: ha	
	+- <u>^</u>		
Date: 2013		is: 192.168.1.59:5250 (CPUI loading: 8% Memory usage: Total 8128MB Free 7203MB Network: Displayed streaming bit rate 0.00 kbps

The **Stream** tabbed page opens in the **Configuration Pane**.

Take a closer look at the user interface.

		Live View	Playback	Config
Properties	Stream Recording	g Schedule	Event Action	
Stream Profile:	Enable			
Video Format:	H.264			
Frame Rate:	5			
Resolution:	full			
Quality:	10(Normal)			
Audio:	Enable Audio			
Lens:	Enable			
Lens Type:				
Camera Position:				
Format	MJPEG			
Frame Rate:	0.5~5			
Resolution:	half			
Format:	MJPEG			
Frame Rate:	0.1~1			
Resolution:	half			

The featured settings on the **Stream** tabbed page are:

Setting	Description	Default	
Stream Profile	Enables/disables the camera .	Disable	
Video Format	Sets the video format for the camera .	Base on camera integration.	
Frame Rate	Sets the frame rate for the video. Frame rate per sec. are configurable.	Base on camera integration.	
Resolution	Sets the resolution for the video.	Base on camera integration.	
Quality	Sets the quality for the video.	Base on camera integration.	
Audio	Enables/disable the audio for the camera .	Base on camera integration.	
Lens	Enables/disable the lens for the camera .	Base on camera integration.	
Lens type	Sets the lens type for the camera .	Base on camera integration.	
Camera Position	Sets the camera position for the camera .	Base on camera integration.	
Format/Frame rate and Resolution	Delivers the multi stream information for the camera.	Base on camera integration.	
Format/Frame rate and Resolution	Delivers the multi stream information for the camera .	Base on camera integration.	

10.1.2.9.3.3. Recording Schedule

It relies on the **Recording Schedule** tabbed page to get a general overview of a camera's recording schedule, or to configure the camera's recording schedule:

To access the **Recording Schedule** tabbed page of a camera:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the camera to configure belongs.
- 4. If a plus sign (+) shows besides the **video device**, click the plus sign (+) to collapse all the existing **camera**(s). Then click the **camera** to configure.

OR

If a minus sign (-) shows besides the **video device**, the existing **camera(s)** collapse already. Simply click the **camera** to configure.

The **Properties** tabbed page opens in the **Configuration Pane** for the **camera** to configure while the other tabbed pages are hidden by default.

			. г х
•	**	Live View Playback Config	
	& Management Server B. Recording Server 2 Camera 2 Wide Device 1 Wide Onexice 1 Wide Onexice 1 Wide Onexice 1 Wide Onexice 1 B. Recording Server 4 B. Recording Server 4 B. Recording Server 1 B. Recording Server 3 Madata Server Ø. Madrix	Prescription Recording Schedule Event Action Camera 2 Enable Name: Camera 1 Description Camera 1 Description	

The **Properties** tabbed page opens in the **Configuration Pane**.

5. Click the Recording Schedule tab.

The **Recording Schedule** tabbed page opens in the **Configuration Pane**.

The **Recording Schedule** tabbed page opens in the **Configuration Pane** to configure the selected **camera**.

• چ	<u>و: پ</u> ه	_ e7 ×						
. X		Properties Stream Recording Schedule Event Action Recording Schedule Event Action Image: Schedule Event Action Time zons of RecordingServer(MVR Recording Server; UTC + 08: 00 Daily view Veekly view Schedule Event Action Daily view Veekly view Schedule Schedule						
	i ⊅i take_POS bit bit bit bit bit bit bit bit bit bit bit bit bit bit	Fit. Sat Aways On Event Boosting (+)) Recording schedule list Priority Name Property Description Pre-record Post-record						
		1 holday On Event 5 5 2 workin Always						
		3 Aways Aways						
		$+ - \prime + 1$						
		v Retention day (2005]] day(s) v Enable audio						
Date: 2013	+ - Al P to	San 1992 188 199 5250 CPU loading: 5% Memory usage: Total B128MB Free 7211MB Network: Displayed streaming bit rate 0.00 kbps						

Take a closer look at the user interface.

Properties Stream Recording Schedule Event Action																			
Recording schedule overview																			
Time zor	ne of Recor	dingServer(N	/R Recording Ser	ver): UTC + 08 :	00														
🔵 Dail	y view 💿	Weekly view																	
2 2	013/08/11 013/08/17		02 03 04	05 06	07 0 1 1 1 1 1 1		10	11 11	12 	13 11	15 11111	16 	17 11	18 11 111	19 11 111	20	21	22 111	23 111 11111
Sun.																			
Mon. Tue.																			
Wed									-							-			
Thu.																			
Fri. Sat.																			
				Alw:	ays 💼	On Ever	nt 💼	Boos	ting								+	•	,° ,•
Recordin	ng schedul	e list																	
Recordir Priority			Description	Pre-record	Post-I	record													
		e list Property On Event	Description	Pre-record 5	Post-I	record													
Priority	Name	Property	Description			record	-												
Priority 1	Name holiday	Property On Event	Description			record													
Priority 1 2	Name holiday workin	Property On Event Always	Description			record													

The featured settings on the **Recording Schedule** tabbed page are:

Group	Setting	Description						
	Daily view	Shows the schedule table in a daily view.						
	Weekly view	Shows the schedule table in a weekly view.						
		Switches the schedule table to any other calendar day.						
	schedule table	Click or drag on the schedule table to view other time slots.						
	1	Moves the selected video device up.						
	+	Moves the selected video device down.						
Recording	Always	 Delivers the times slots in which the video recording is on unconditionally. See <u>Add A Schedule</u> to know how to change the setting. 						
schedule overview	On Event	 Delivers the times slots in which the video recording is on when an event occurs. See <u>Add A Schedule</u> to know how to change the setting. 						
	Boosting	 Delivers the times slots in which the video are recorded with higher frame rate. See <u>Add A Schedule</u> to know how to change the setting. 						
	+	Scrolls the schedule table to the left.						
	→	Scrolls the schedule table to the right.						
	<u>م</u>	Zooms out the daily time schedule table to bring more time slots into view.						
	م	Zooms in the schedule table to view the time slots in a more specific way.						
	Name	Delivers the name of the schedule.						
	Property	 Delivers how videos are recorded, Always, On Event or Boosting. See <u>Add A Schedule</u>to know how to change the setting. 						
	Description	Delivers a brief description for this schedule for the easier identification of it.						
Recording	+	Opens a dedicated page to add a recording schedule to a camera. See <u>Add A Schedule</u> for the details. 						
schedule list	_	Deletes the selected schedule . Click a schedule to select it. 						
		Edits the selected schedule . Click a schedule to select it. 						
	+	Moves the selected schedule up. Click a schedule to select it. 						
	¥	Moves the selected schedule down. Click a schedule to select it. 						
Others	Retention Days	Sets the retention days of the recorded video. 1 to 999 is configurable.						
	Enable Audio	Enables/disables audio.						

10.1.2.9.3.3.1. Add A Recording Schedule to A Camera

On the **Recording Schedule** tabbed page, the **recording schedule list** is featured to deliver the **recording schedule(s)** of a camera. It is also a group of settings to configure the **recording schedule(s)** of a camera. The group of settings features a add sign icon + to add a **recording schedule** to a camera. Click such + icon to open a dedicated page to add a **recording schedule** to a camera.

To open the dedicated page to add a **recording schedule** to a camera:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the camera to configure belongs.
- 4. Open the Recording Schedule tabbed page of a camera.

The **Recording Schedule** tabbed page opens in the **Configuration Pane**.



The **Recording Schedule** tabbed page opens in the **Configuration Pane** to configure the selected

Find the **recording schedule list** group of settings in the middle of the **Recording Schedule** tabbed page.

- 5. Find the recording schedule list group of settings in the middle of the Recording Schedule tabbed page. And find the + icon at the bottom of the recording schedule list.
- 6. Click the + icon.

The dedicated page to add a **recording schedule** to a camera then opens.

		cated page to add a recording schedule to a hen opens.
et jo		Liv View Playback Config
 B. MR7 Managament Server B. Recording Server C. Counting C. C	MJPEG MPEGA H364 J MJPEG	>AdSEdit de Daily
	د ۲	Dane and back to very emerged by a second back to very emerged back to very emerged by a second back to very emerged back to very emerged by a second back to very emerged back to very

Take a closer look at the user interface.

Live View Playback Config	_ & ×
Properties Stream Recording Schedule Event Action	
Recording schedule > Add/Edit	
Select Schedule: Always 🔸 👘	
Recursive mode: Daily	
00 01 02 03 04 05 06 07 08 09 10	11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 13 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 20 20 21 22 23 11 12 14 15 16 17 18 19 10 10 10 10 10 10 10 10 10 10 10 10 10
Recording type: 🍨 Always 🔵 Recording on event 🔵 Boosting recording 🔵 Disabled	
Video encode Original profile	
Modify video frame rate	
MJPEG: Moidfy frame rate 30	
MPEG4: Keep key frame	
H.264: Keep key frame MxPEG: Keep key frame	

The featured settings are:

Setting	Description	Default	
Select Schedule	 Selects an existing s described in <u>C</u> Click the + To create a ne details. 	The " Always " schedule	
Schedule table	Shows the select in an overview ta	ted schedule or the schedule about to be added ble.	
Recording type	Sets how videos schedule about > Options availa Option Always Recording on Event		Always

	Boosting recording	 Records videos with higher frame rate. When set to Boost Recording, the Normal Video encode group of settings and Event Video encode group of settings both become available so users can set which frame rate to record videos when an event occurs or when nothing happens ("normally"). Select Modify video frame rate to be able to adjust the MJPEG video frame rate from 1 to 30. When set to Boost Recording, the Event typesetting also becomes available so users can set which event to trigger video recording. 	
	Disabled	Disables video recording.	
Video Encode		o format for the recording schedule. video encode are original profile and modify ne rate.	

Take a closer look at the **Recording schedule list**:

Recording schedule list								
	Name	Property	Description	Pre-record	Post-record			
	Weekly	Always	Mon. Wed. Fri.					
2	monthly 1	On Event	the 31th day of every month	7	10			
3	monthl	Boosting	the 2nd Mon. of every month					
	monthl	Disabled	the last Fri. of every month					
+	/	` ↑						

The information delivered is:

Setting	Description
Name	Delivers the name of the schedule currently applied to the camera .
Property	Delivers when and how to record videos.
Description	Delivers the brief description of the schedule (profile).
Pre-record	Sets the time to start recording right before the scheduled time.
Post-record	Sets the time to keep recording after the scheduled time elapses.

The featured settings are:

Setting	Description
+	 Click this add sign icon to open another page to add a schedule. Available options are the schedules created as described in <u>Create A Schedule</u>.
—	 Deletes the selected schedule. Click a schedule to select it.
۲	 Edits the selected schedule. Click a schedule to select it.
Ť	Moves the selected schedule up. Click a schedule to select it.
¥	Moves the selected schedule down. Click a schedule to select it.

10.1.2.9.3.4. Event Action

It relies on the **Event Action** tabbed page to enable/disable the event(s) that will launch action(s) from the **Camera**.

To access the **Event Action** tabbed page for the **Camera**:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the camera to configure belongs.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.



4. Click the **Event Action** tab.

The Event Action tabbed page then opens.

The **Event Action** tabbed page opens in the **Configuration Pane** to configure the selected **recording server**.

• چ	د به	_ デ X
	NVR Wanagement Server Recording Server B. NVR Recording Server B. NVR Recording Server B. & Recaption Counting Counting B. & Immenision	Properties Device Overview Velume Group Recording Schedule Auto Backup Event Action Event Event Event Schedule Stop Related Action 🖌 Sec. 🖌 Action List
		+ − ∥ G

The featured settings on the Event Action tabbed page are:

Group	Icon / Setting	Description					
	+	 Adds an event. Available events are connection lost, No enough days for retention days and Motion started. 					
	—	Deletes the selected event.Click any of the event info cells to select the event.					
	۲	Edits the selected event.Click any of the event info cells to edit the info.					
	L	Copies the event setting to another device .					
	Event Name	Delivers the name of the event.Click the Event Name cell to edit the name of the event.					
Event	Event	 Delivers the event type. Four types are available: connection lost, No enough days for retention days and Motion started. 					
	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>. 					
	Stop Related Action	Stop action afterSec.					
	Sec.	Sets when to stop the action launched by the Camera after the even occurs. 1 to 60 seconds are configurable.					
	Action list	 Delivers all the actions set up for the Camera to take when the event occurs. The available action is E-Mail to multiple, DO turn on, Go to preset, Video edge display and Play alter sound. 					
	+	 Adds a schedule. Available options are the schedules created as described in Create A Schedule. 					
	_	Deletes the selected schedule . Click a schedule to select it.					
	۲	Edits the selected schedule . Click a schedule to select it. 					
	Ť	Moves the selected schedule up. Click a schedule to select it. 					
Add schedule	¥	Moves the selected schedule down. Click a schedule to select it. 					
	談	Opens a schedule overview dialog that shows the applied schedule(s) in a daily view or a weekly view.					
	S	Copies the schedule setting to another event.					
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule. 					
	Property	Sets whether to allow or block the applied schedule 's time period(s).					
	Description	Delivers a brief description for this schedule for the easier identification of it.					
Add action	Action List	Delivers all the actions set up for the Camera to take when the event					

		 occurs. The available action is E-Mail to multiple, DO turn on, Go to preset, Video edge display and Play alter sound
	+	 Adds an action for the Recording Server to take when the event occurs. The available action is E-Mail to multiple, DO turn on, Go to preset, Video edge display and Play alter sound
	-	Deletes the selected action. Click an action to select it.
Action properties		 Sets whom to send the alert email(s) to. This group of settings is available when the E-Mail to multiple, DO turn on, Go to preset action is added.

10.1.2.9.4. Configure A DI/DO of Camera

To configure the digital input/output pins and the event & action for a video device:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the **Video Device** to which the **DI/DO** to configure belongs.
- If a plus sign (+) shows besides the video device, click the plus sign (+) to collapse all the existing digital input/output. Then click the digital input/output to configure.

OR

If a minus sign (-) shows besides the **video device**, the existing **camera(s)** collapse already. Simply click the **camera** to configure.

The **DI/DO Overview** tabbed page opens in the **Configuration Pane** for the **digital input/output** to configure while the **Event Action** tabbed page is hidden by default.

~ 😧	**			Live Vi	w Playbaci	ĸ	Config	ъ х
	B Management Server B Management Server B Recording Server 2 B Recording Server 2 S Video Device 1 G & Video Device 2 G Camera 1 G Camera 2	DVDO C	Wew Event Activ		Normal State	/ 5	State	_
	ID Device 1		Digital Input #1	Video Device 2 - DI	Normal Open	ę	S	
	ID Device 2		Digital Output #1	Video Device 2 - D.	Normal Close		🔮 Tum off	
	P. Recording Server 4 P. Recording Server 1 P. Recording Server 3 Anticonfig Server 3 Anticonfig Server 3 Anticonfig Server 1 Anticonfig Server 2							

The DI/DO Overview tabbed page opens in the Configuration Pane.

An overview of the featured tabbed pages:

Tabbed Page	Description
DI/DO Overview	Enables/disables the digital input/output pin. Configures the name, type and state for the digital input/output pins
Event Action	Enable/disable the event(s) that will launch action(s) from the digital input/output , which is when the input signal is on.

10.1.2.9.4.1. DI/DO Overview

It relies on the **DI/DO Overview** tabbed page to configure the **digital input/output** for a **video device**:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the DI/DO to configure belongs.

The **DI/DO Overview** tabbed page opens in the **Configuration Pane** for the **digital input/output** to configure while the **Event Action** tabbed page is hidden by default.



The DI/DO Overview tabbed page opens in the Configuration Pane.

The featured settings are:

Setting	Description	Default
	 Enables/disables the digital input/output pins. Select All to enable all device(s) Select None to disable all devices Select Invert to reverse the selection. 	All (All digital input/output pins are enabled.)
Enable 🔽	Enables/disables the digital input/output pin.	Enabled
Ю Туре	 Delivers what the pin does, digital input or digital output. Click the IO Type cell of an digital input/output pin to view the pin's Associated Camera(s), or to associate a camera with the digital input/output pin. 	
Pin Name	 Delivers the name of the input/output pin. Click the Pin Name cell to edit the name of the digital input/output pin. 	
Normal State	Delivers whether the digital input/output pin is normally open or normally close.	
State	Delivers the current state of the IO device . for digital input for digital output and can be turned off	

10.1.2.9.4.2 Event Action

It relies on the **Event Action** tabbed page to enable/disable the event(s) that will launch action(s) from the **digital input/output pin**, which is when the input signal is on.

To access the **Event Action** tabbed page for a **digital input/output pin**:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the topic Video Device.
- 3. Click the Video Device to which the DI/DO to configure belongs.

The **DI/DO Overview** tabbed page opens in the **Configuration Pane** for the **digital input/output** to configure while the **Event Action** tabbed page is hidden by default.

The DI/DO Overview tabbed page opens in the Configuration Pane.

•	**			Live Vi	ew Playbac	k 👘	- F	×
	ல Management Server 요		Event Act					
-	Camera 2	Enable	I/O Type	Pin Name 🧳	Normal State	🖍 Shi	tate	
H.	IO Device 1		Digital Input #1	Video Device 2 - DI	1 Normal Open	The second se	ĥ	
OF ST	ID Device 2		Digital Output #1	Video Device 2 - D.	Normal Close	۲	Turn off	
	P. Recording Server 4 P. Recording Server 1 P. Recording Server 1 P. Recording Server 3 Avtadata Server P. Metadata Server 1 P. Metadata Server 2	/						

5. Click the **Event Action** tab.

The Event Action tabbed page then opens.

I

The Event Action tabbed page opens in the Configuration Pane to configure the selected DI/DO.

• چ	**	Live View Playback Config	- 8 X
	Management Server B. Recording Server 2 Control of Server 3 Metadata Server 3 Metadata Server 3	Di/Do Overview Event Action Digital Input pin Pin List Video Device 2 - Di 1	

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Take a closer look at the user interface. The **Event Action** tabbed page shows an overview of the available **digital input** pin(s) at the top. And the **event** settings are in the following. Click a listed **digital input pin** to show the **Event** group of settings.

The Event Action tabbed page

Management Server Baccording Server 2 Baccording Server 2 Baccording Server 2 Camera 2 Camera 2 Di Device 1 Baccording Server 4 Baccording Server 4 Baccording Server 3 Metadata Server 1 Metadata Server 3 Metadata Server 3	Click a digital input pin to show the Event group of settings.	An overview of the digital input pin(s).
Anagement Server Anagement Server	yback Config ayback Config Digital Input pin Pin List Video Divice 2 - Di 1 Event Event Event Name ✓ Event Schedule Stop Related Action ✓ Sec. ✓ Action List + - ✓ ♥	The Event setting opens.

The **Event** settings are:

Group	Icon / Setting	Description
	+	Adds an event. The available event is Digital input triggered .
	—	Deletes the selected event.Click any of the event info cells to select the event.
		Edits the selected event. Click any of the event info cells to edit the info.
	- G	Copies the event setting to another Digital input triggered.
	Event Name	Delivers the name of the event.Click the Event Name cell to edit the name of the event.
Event	Event	Delivers the event type.Only one type is available: Digital input triggered.
	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>.
	Stop Related Action	Sets whether to stop the action launched by the digital input pin sometime after the event occurs or leaves it on automatic.
	Sec.	Sets when to stop the action launched by the digital input pin after the event occurs.1 to 60 seconds are configurable.

	Action list	 Delivers all the actions set up for the digital input pin to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to preset, Video edge display and Play alert sound. 			
	+	 Adds a schedule. Available options are the schedules created as described in Create A Schedule. 			
	—	Deletes the selected schedule . Click a schedule to select it.			
	۲	Edits the selected schedule . Click a schedule to select it.			
	Ť	Moves the selected schedule up. Click a schedule to select it. 			
Add schedule	Ŧ	Moves the selected schedule down. Click a schedule to select it. 			
	题	Opens a schedule overview dialog that shows the applied schedule(s) in a daily view or a weekly view.			
	G I	Copies the schedule setting to another event.			
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule. 			
	Property	Sets whether to allow or block the applied schedule 's time period(s).			
	Description	Delivers a brief description for this schedule for the easier identification of it.			
	Action List	 Delivers all the actions set up for the IO device to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to preset, Video edge display and Play alert sound. 			
Add action	+	 Adds an action for the IO device to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to preset, Video edge display and Play alert sound 			
	—	Deletes the selected action. Click an action to select it. 			
Action properties		 Sets whom to send the alert email(s) to (for E-Mail to multiple) Sets which digital output pin to turn on (for DO turn on). Sets associated camera to go to the "preset point" (for Go to Preset). This group of settings is available only when any of the available actions is added. 			

10.1.2.10. Configure An IO Device

To configure an **IO Device**:

- 1. From the **Tree Console**, click the topic **Recording Server**.
- 2. Click the **Recording Server** to which the **IO device** to configure belongs.

The **IO device** to configure becomes highlighted and the **Properties** tabbed page opens in the **Configuration Pane** while the **DI/DO Overview** and **Event Action** tabbed pages are hidden by default.

The **IO device** to configure becomes highlighted.

		The Pr	operties tabbed p	age opens in th	ne Configuration I	Pane.	
_							_
• چ	~ ~			Live View Playback	Config	_ & >	Ì
	Recording S Recording S Recording S Recording S Second S Second S Second S Second S Second S Second S	ver Server 2 Jevice 1 mera 1 mera 2 Jevice 2 Tra 1 tera 2	Properties DI/DO Overview I/O Device: V Enable Name: I/O Device 1 Description: I/O Device 1 Descrip				
	대한 10 De 대학 10 De	g Server 4 Device 1 Device 2 vice 2 g Server 1 Device 1	Model: SCB-C31 + SCB-C2 IP address: 192.168.1.11 Port 10001 Address ID: 111	6 • • • • • • • • • • • • • • •	27)		

See <u>Properties</u> for the settings featured on the **Properties** tabbed page.

See <u>DI/DO Overview</u> for the settings featured on the **DI/DO Overview** tabbed page.

See <u>Event Action</u> for the settings featured on the **Event Action** tabbed page.

10.1.2.10.1. Properties

It relies on the **Properties** tabbed page to configure the properties of an **IO device**:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the Recording Server to which the IO device to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **IO device** to configure while the **DI/DO Overview** and **Event Action** tabbed pages are hidden by default.

The IO device to configure becomes highlighted.

		The Properti e	es tabbed page opens in the Configuration Pane .
• چ	~~		_ 占 X
		ver Propert Server 2 Device 1 mera 1 I/O Devic mera 2 Device 2 Nam pra 1 Descriptio	
	🗆 🛃 Recording 🖽 🗸 Video	Device 1	
	E & Video I D De I D De II Recordin E & Video II & Video	vice 1 Provide 2 Provide 2 Provide 2 Provide 1 Address I	

The featured settings on the **Properties** tabbed page are:

Group	Description	Default
IO Device 🗹 Enable	Enables/disables the IO device .	Selected (Enabled)
Name	Sets the name of the IO device .	"IO Device #"
Description	scription Provides a brief description of the IO device for the better identification of it.	
Model	Model Sets the model of the IO device.	
IP address	Paddress Sets the IP address of the IO device.	
Port	Sets the port of the IO device . • 0~65535 are configurable.	
Address ID	Sets the address ID of the IO device . • 0~255 are configurable.	0

10.1.2.10.2. DI/DO Overview

It relies on the **DI/DO Overview** tabbed page to configure the digital input/output for an **IO device**:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the Recording Server to which the IO device to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **IO device** to configure while the **DI/DO Overview** and **Event action** tabbed pages are hidden by default.

The IO device to configure becomes highlighted.

		The Properties tabbed page opens in the Configuration Pane .	_ & X
۵ م	<i>**</i>	Live View Playback Config	~
	& Management Se er B, Recordin S9 ver B, Recordin S9 ver C executin S9	Properties D/DO Overview (Event Action) VO Device: Pable Name: VO Device 1 Description: VO Device 1 Description	
	□ I Recording Server 4 III I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Model: SCB-C31 + SCB-C26 -	
	표 및 Video Device 2	IP address, 192,188,1.11 Port 10001 Address ID: 111 (0-127)	

3. Click the **DI/DO Overview** tab.

The **DI/DO Overview** tabbed page then opens.

The DI/DO Overview tabbed page opens in the Configuration Pane					

0 •] * *			Live View	P	Раубаск	Cor	_ ප ×
Management Server B. Recording Server B. Recording Server 2 B. Recording Server 2 Control Server 1 Control Server 2 Control Server 2 Control Server 2 Control Server 2	Properti	es DI/DO Overview	Event Action				
	Enable	I/O Type	Pin Name	1	Normal State		✓ State
B A Recording Server 4 B A Recording Server 1		Digital Input #1	IO Device 1 - DI	1	Normal Open	'	%
🖽 🖽 Recording Server 3							V
🖽 🚓 Metadata Server 🗵 🌠 Metadata Server 1							🔹 Turn off
🖽 💯 Metadata Server 2 🖽 🎜 Metadata Server 3		Digital Output #2	IO Device 1 - DO		Normal Close		学 Turn off
i in portunation convert 4 □ portunation con							

Group	Description	Default		
	 Enables/disables the IO device. Select All to enable all device(s) Select None to disable all devices Select Invert to reverse the selection. 			
Enable 🔽	Enables/disables the IO device .	Enabled		
Ю Туре	 Delivers what the IO device does, digital input or digital output. Click the IO Type cell of an IO device to view the IO device's Associated Camera(s), or to associate a camera with the IO device. 			
Pin Name	 Pin Name Delivers the name of the input/output pin of the IO device. Click the Pin Name cell of an IO device to edit the pin name for the IO device. 			
Normal State	Normal State Delivers whether the IO device is normal open or normal close.			
State	Delivers the current state of the IO device . for DI for DO and can set turn off			

10.1.2.10.3. Event Action

It relies on the **Event Action** tabbed page to enable/disable the event(s) that will launch action(s) from the **IO device**, which is when the input signal is on.

To access the **Event Action** tabbed page for the **IO device**:

- 1. From the Tree Console, click the topic Recording Server.
- 2. Click the **Recording Server** to which the **IO device** to configure belongs.

By default, the Properties tabbed page then opens at the Configuration Pane.

	The Properties tabbed page opens in the Configuration Pane to configure the selected IO device .
<u>چ</u> ہ ہ	Live View Playback Config
Camera 2	I/O Device: Z Enable Name: I/O Device 1 Description I/O Device 1 Description
and a service 1 and a service 1 and a server 1 and a serve	Port 10001

3. Click the Event Action tab.

The **Event Action** tabbed page then opens.

The Event Action tabbed page opens in the Configuration Pane to configure the selected IO device.

•	**	_ ピ X
	Recording Server Recording Server Recording Server Recording Server 2 Xideo Device 1 Xideo Device 1 Xideo Device 1 Recording Server 1 Recording	Properties DHDO Overview Event Action Digital Input pin Pin List IO Device 1 - Di 1 IO Device 1 - Di 2 Event Event Name Schedule Stop Related Action Sec. Action List + -

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Take a closer look at the user interface. The **Event Action** tabbed page shows an overview of the available **digital input** pin(s) at the top and the **event** settings in the following.



The **Event Action** tabbed page

The **event** settings are:

Group	Icon / Setting	Description
	+	Adds an event. The available event is Input signal on.
	—	Deletes the selected event.Click any of the event info cells to select the event.
		Edits the selected event.Click any of the event info cells to edit the info.
	G	Copies the event setting to another digital input pin.
	Event Name	Delivers the name of the event.Click the Event Name cell to edit the name of the event.
	Event	Delivers the event type.Only one type is available: Input signal on.
Event	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>.
	Stop Related Action	Sets whether to stop the action launched by the IO device some time after the event occurs or leaves it on automatic.
	Sec.	 Sets when to stop the action launched by the IO device after the event occurs. 1 to 60 seconds are configurable.
	Action list	 Delivers all the actions set up for the IO device to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to Preset and On screen display.

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Group	Icon / Setting	Description					
	+	 Adds a schedule. Available options are the schedules created as described in Create A Schedule. 					
	_	Deletes the selected schedule . Click a schedule to select it.					
		Edits the selected schedule . Click a schedule to select it. 					
	Ť	Moves the selected schedule up. Click a schedule to select it.					
Add schedule	Ŧ	Moves the selected schedule down. Click a schedule to select it. 					
	臌	Opens a schedule overview dialog that shows the applied schedule(s) in an daily view or a weekly view.					
	L	Copies the schedule setting to another event.					
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule. 					
	Property	Sets whether to allow or block the applied schedule 's time period(s).					
	Description	Delivers a brief description for this schedule for the easier identification of it.					
	Action List	 Delivers all the actions set up for the IO device to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to Preset and On screen display. 					
Add action	+	 Adds an action for the IO device to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to Preset and On screen display. 					
	_	Deletes the selected action. Click an action to select it. 					
Action properties		 4. Sets whom to send the alert email(s) to (for E-Mail to multiple). 5. Sets which digital output pin to turn on (for DO turn on). 6. Sets which associated camera to go to the "preset point" (for Go to Preset). This group of settings is available only when any of the available actions is added. 					

10.1.3. Configure Metadata Server

A **Metadata Server** is the server to host third-party device servers and archive their data. The "plugin" is a module for each of the custom integrations working with the **Metadata Server** to make the **Metadata Server** capable of exchanging data with the third-party Metadata source through a "Metadata channel".

This allows faster development cycles from field requests to a finished tested product. When integrated with 3rd party products like POS and access control products, which are used as Metadata sources by the NUUO Metadata structure, the NUUO platform becomes a seamless interface allowing intelligent search and data filtering for monitoring and handling events. Data is supplied to the Metadata source via Metadata channels. For example: the Door channels supply the Access Control Server and the Register channels supply the POS Server. Through the Metadata Plugin, users can manage metadata by recording real time information in databases which describe events that link to video. The **Metadata Server** integrates third party data and video in a unified management platform. NUUO provides different plugin modules for 3rd party products to meet your needs.



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To access the setting of a Metadata Server:

 Access the Physical Config ("physical configuration") as described in <u>Physical</u> <u>Config (Management Server)</u>.

The physical configuration opens onscreen, and the **Tree Console** shows the three sub settings: **Recording Server**, **Metadata Server**, and **Matrix**.



If a plus sign (+) shows besides the sub topic Metadata Server, click the plus sign (+) to collapse the existing Metadata Server(s). Then click the Metadata Server to configure.

OR

If a minus sign (-) shows besides the sub topic **Metadata Server**, the existing **Metadata Server**(s) collapse already. Simply click the Metadata Server to configure.

The **Properties** tabbed page then opens at the **Configuration Pane** to configure the selected **Recording Server** while the other five tabbed pages are hidden.

-

- The Properties tabbed page opens in the Configuration

	Pane to configure the selected Metadata Server.
et * o [∽ ©]	드 라 > Live View Playback Config
 MR Management Server B. Recording Server S. Rec	<complex-block><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></complex-block>
	Server address: 192,168,1.59,5250 CPU loading: 0% Memory usage: Total 8128MB Free 7214MB Network: Displayed streaming bit rate 0.00 ktops

3. Access one of these tabbed pages to configure the **Metadata Server**.

A function overview of these tabbed pages:

Setting	Description
Properties	 Enables/disables the Metadata Server. Enters a brief description of the Metadata Server for the better identification of it. Launches an application to detect and install the available 3rd-party device servers within the network. See <u>Properties</u> for the settings.
Plugin Overview	 Delivers an overview of all the "plugins", a piece of software, which enables the data exchange between the Metadata Server and the third-party device server through a "metadata channel" A third-party device server is connected to the Metadata Server as a "metadata source".
Source Overview	Delivers an overview of all the third-party device servers, i.e. "metadata sources", that are connected to the Metadata Server .
Event Action	Sets the event(s) that will launch action(s) from the Metadata Server.

10.1.3.1. Properties

It relies on the **Properties** tabbed page to configure the properties of a **Metadata Server**:

1. From the Tree Console, click the topic Metadata Server.

The **Properties** tabbed page opens in the **Configuration Pane** for the **Metadata Server** to configure while the other tabbed page is hidden by default.

					_	_		_ & ×
•	et 19			Live View P	ayback Con	fig		
	S W/R Management Server Recording Server Recording Server S Recording Server S Conting S VIOD0 S default name S VIOD0 S default name S VIOD0 S Matrix S VIOD0 S VIOD0	Metadata Server: Name: Description: Address: Storage volume: Free capacity: Total capacity: Time zone:	Enable NVR Meladata LAN / WAN LAN 1 LAN 2 WAN Titan Metadata VOLUME2 292.13 GB 293.41 GB UTC + 08:00 CLaunch Ind	W Source Overview Event / Server Address 192.168.5.58.5252 192.168.1.59.5252 220.132.124.68.3209 Server stallation Witard				
Date: 2013/	08/16 Time: 19:47:55 Username: admin Server addre	ss: 192,168,1,59,5250.	CPU loading;	0% Memory usage: Total 812	8MB Free 7214MB	Network: Displayed strea	ming bit rate 0,00 kbps	

The Properties tabbed page opens in the Configuration Pane.

The featured settings on the **Properties** tabbed page are:

Group	Description	1	Default
Metadata Server 🗹 Enable	Enables/disa	Selected (Enabled)	
Name	Sets the nar	ne of the Metadata Server.	"Metadata Server #"
Description		prief description of the Metadata Server for entification of it.	
	Delivers the	following addresses:	
	Setting	Description	
	LAN1	 Delivers the server's LAN port 1's currently networked IP address. If the LAN port isn't in use, the networking status isn't available. 	
Address	LAN 2	 Delivers the server's LAN port 2's currently networked IP address. If the LAN port isn't in use, the networking status isn't available. 	
	WAN	Delivers the server's WAN address.If the WAN isn't in use, the networking status isn't available.	
Launch Install Wizard		n application to detect and install the available erver(s), i.e. the "Metadata Server", within the	
Server type	Delivers the	type of the Metadata Server.	
Storage volume	Volume 1		
Free capacity		free disk space of the disk volume selected in lume setting.	
Total capacity		total disk space of the disk volume selected in lume setting.	



Metadata Server and Recording Server cannot share the same volume group due to performance issue.

10.1.3.2. Plugin Overview

The "plugin" is a module for each of the custom integrations working with the **Metadata Server** to make the **Metadata Server** capable of exchanging data with the third-party Metadata source through a "Metadata channel".

The **Plugin Overview** tabbed page is featured to deliver an overview of all the "plugins" that enable the data exchange between the **Metadata Server** and the Metadata source through "Metadata channel".

To access the Plugin Overview tabbed page for the Metadata Server:

1. From the Tree Console, click the topic Metadata Server.

By default, the Properties tabbed page then opens at the Configuration Pane.



2. Click the Plugin Overview tab.

The **Plugin Overview** tabbed page then opens.

The **Plugin Overview** tabbed page opens in the **Configuration Pane** to configure the selected **Metadata Server**.

								_ & ×
ۍ چ	ी क			Live View Playb	oack Config			
		Select Nar TCF		Source Overview Event Actio	an"	_		_
Date: 2013	+ - 삶 운 ቱ 0010 Tme 195123 Usemame: admin Server address		0 I CPU loading 34	Memory usage: Total #128407	8 Free 7108MB Network D		0.00 kbos	

Take a closer look at the user interface.

		Live View Playback Config	_ & ×
Properti	es Plugin Overview S	ource Overview Event Action	
Select	Name	Version	
	TCP Client	2.0.0.3	
	VAULT_Falco	2.0.0.3	

The featured settings on the **Plugin Overview** tabbed page are:

Setting	Description	Default
	Select the drop-downs All, None or Invert to select all plugins, deselect all plugins or reverse the selection.	Enable
Select	Selects/deselects the plugin.	Enable
Name	 Delivers the name of the plugin. See <u>Properties</u> to know how to set the name for the plugin. 	
Version	Delivers the software version of the plugin .	

The metadata plugin Falco default port is 5000.

10.1.3.3. Source Overview

The **Source Overview** tabbed page delivers an overview of all the "Metadata sources", i.e. the third-party device servers, connected to the Metadata Server.

To access the **Source Overview** tabbed page for the **Metadata Server**:

1. From the Tree Console, click the topic Metadata Server.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

		Г			bbed page opens ir the selected Metac	n the Configuration data Server.
ۍ چ	* *			Live View Playback	Config	_ & X
	B. Recording Server B. Recording Server B. Recording Server 2 B. Recording Server 2 B. Recording Server 3 B. Recording Server 1 B. Recording Server 3 A Metadula Server B. Metadula Server 1 B. Access Control Device	Pro-mes Metadata Server Name: Description:			tion	
	B * Metadata Server 2 B * Metadata Server 3 B * Metadata Server 3 B * POS Device D * POS Device D * Metadata Server 4 Matrix 4 Matrix 4	Address:	LAN / WAN LAN 1 LAN 2 WAN	Address 192.168.2.1.5270 192.168.2.2.5270 140.112.1.2.5270		

2. Click the Source Overview tab.

The **Source Overview** tabbed page then opens.

		Live V	View Playback Config
Properties F	llugin Overview So	urce Overvie	Hew Event Action
Enable Type	Plugin Name	Name	Description
🗹 тср с	TCP Client	fake_POS	β

The featured settings on the **Source Overview** tabbed page are:

Setting	Description	Default
	Select the drop-downs All , None or Invert to select all metadata sources, deselect all metadata source or reverse the selection.	All
Select	Selects/deselects the metadata source.	Selected (Enabled)
Туре	 Delivers the type of the metadata source, i.e. the 3rd-party device server. See also the <u>Properties</u> tabbed page of a metadata source. 	
Plugin Name	Delivers the name of the Metadata source.	
Name	 Delivers the name of the Metadata channel. See also the <u>Properties</u> tabbed page of a metadata channel. 	
Description	 Delivers the software version of the metadata source. See also the <u>Properties</u> tabbed page of a metadata source. 	

10.1.3.4. Event Action

It relies on the **Event Action** tabbed page to set the events that launch action(s) from the **Metadata Server**.

To access the **Event Action** tabbed page for the **Metadata Server**:

1. From the Tree Console, click the topic Metadata Server.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

				bbed page opens in the selected Metad	
•	* *		Live View Playback	Config	_ & X
		Metadata Server: Name: Description: Address:			

2. Click the Event Action tab.

The Event Action tabbed page then opens.

The **Event Action** tabbed page opens in the **Configuration Pane** to configure the selected **Metadata Server**.

		_ e	×
ۍ چ	et to	Live View Pt yback Config	Â
	iu 🚰 faka nan	Properties Plugin Overview Source Overview Event Action Event Event Name Schedule Stop Related Action / Sec. / Action List	
?=		+ - ∥ ©	
The featured settings are:

Group	Icon / Setting	Description
	+	Adds an event. Available events are Server disconnect and Fail to write to drive.
	-	Deletes the selected event.Click any of the event info cells to select the event.
		Edits the selected event.Click any of the event info cells to edit the info.
	- Garage - State - Sta	Copies the event setting to another Device .
	Event Name	Delivers the name of the event.Click the Event Name cell to edit the name of the event.
Event	Event	 Delivers the event type. Two types are available: Server disconnect and Fail to write to drive.
	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>.
	Stop Related Action	Stop action after sec.
	Sec.	Sets when to stop the action launched by the Metadata Server after the event occurs. 1 to 60 seconds are configurable.
	Action List	 Delivers all the actions set up for the Metadata Server to take when the event occurs. The available actions are E-Mail to multiple and Play alert sound.
	+	 Adds a schedule. Available options are the schedules created as described in <u>Create</u> <u>A Schedule</u>.
	—	Deletes the selected schedule . Click a schedule to select it.
	۲	Edits the selected schedule . Click a schedule to select it.
	1	Moves the selected schedule up. Click a schedule to select it.
Add schedule	Ŧ	Moves the selected schedule down. Click a schedule to select it.
	繱	Opens a schedule overview dialog that shows the applied schedule(s) in a daily view or a weekly view.
	- G	Copies the schedule setting to another event.
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule.
	Property	Sets whether to allow or block the applied schedule 's time period(s).
	Description	Delivers a brief description for this schedule for the easier identification of it.
Add action	Action List	 Delivers all the actions set up for the Metadata Server to take when the event occurs. Available actions are Email to multiple and Play alert sound
	+	Adds an action for the Metadata Server to take when the event occurs. • One action is available: Email to multiple .

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_	Deletes the selected action. Click an action to select it.
E-Mail to Multiple	Click this setting to open a group of Action properties settings to a whom to send alert emails to.

10.1.3.5. Add A Metadata Source

To add a **metadata source**, i.e. a **POS server** or an **access control server**, to a **Metadata Server**:

1. From the Tree Console, click the topic Metadata Server.

All the existing **Metadata Server(s)** collapse under the sub topic **Metadata Server**.

2. Click the Metadata Server to add a metadata source to.

The Metadata Server to add a metadata source to becomes highlighted.

3. From the bottom of the **Tree Console**, click the add icon +.

A tiny dialog then opens showing the options to add a metadata source.

A new **metadata source**, named "metadata source" by default will be appended under the selected **Metadata Server**, and a **Properties** tabbed page will open in the **Configuration Pane** for users to configure the newly added **metadata source**.

The	e newly added	l metadata so	ource is appended to the Metadata Server.	
			operties tabbed page opens in the Configuration Pane.	
• چ	್ 'ಕಿ		Live View Playback Comfg	8 X
	B. WAR Management B. Recording S Recording S B. Recording S B. Metadata Server B. Nadatata A B. Nadatata A	ver 9 Server	Properties Cannel Overview Headda Source Image Hugh type: CP Client Name Feba.P03 Description Connection test Image TCP Server Pre: 1000	
	+ - ‡1	<u>ئ</u> ک		

To configure a **metadata source**, see <u>Configure A metadata source</u>.

10.1.3.6 Delete A Metadata Source

To delete a **metadata source**, i.e. a **POS server** or an **access control server**, from a **Metadata Server**:

1. From the Tree Console, click the topic Metadata Server.

All the existing **Metadata Server(s)** collapse under the sub topic **Metadata Server**.

- 2. Find the Metadata Server to delete the metadata source from.
- 3. If a plus sign (+) shows besides the **Metadata Server**, click the plus sign (+) to collapse the existing **metadata source**(**s**). Then click the source to delete.

OR

If a minus sign (-) shows besides the **Metadata Server**, the existing **metadata source(s)** collapse already. Simply click the source to delete.

The metadata source to delete becomes highlighted.

4. From the bottom of the **Tree Console**, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.



- 5. Click **Yes** to confirm the deletion.
- 6. Click the **apply button** on the **Top Toolbar** to apply the change.

10.1.3.7 Configure A Metadata Source

To configure a **metadata source**:

1. From the Tree Console, click the topic Metadata Server.

All the existing **Metadata Server(s)** collapses under the sub topic **Metadata Server**.

 If a plus sign (+) shows besides the Metadata Server to configure, click the plus sign (+) to collapse the existing metadata source(s). Then click the POS device to configure.

OR

If a minus sign (-) shows besides the **Metadata Server** to configure, the existing **metadata source(s)** collapse already. Simply click the **metadata source** to configure.

The **metadata source** to configure becomes highlighted and the **Properties** tabbed page opens in the **Configuration Pane** while the other tabbed pages are hidden by default.



- See <u>Properties</u> for the settings featured on the **Properties** tabbed page.
- See <u>Channel Overview</u> for the settings featured on the Channel Overview tabbed page.
- See <u>Event Action</u> for the settings featured on the **Event Action** tabbed page.

10.1.3.7.1 Properties

It relies on the **Properties** tabbed page to configure the properties of a **metadata source**:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the Metadata Server to which the metadata source to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **metadata source** to configure while the other tabbed pages are hidden by default.

The Properties tabbed page opens in the Configuration Pane.

© ~ o ^t :₀	Live View Playback Config
Image: Second secon	enties Channel Overview Event Action a Source: V Enable ugin type: TCP Client urce type: TCP Client Name: fake_POS scription:
Ex, Metadata Server KNR Metadata Server TCP Inf fake POS	ction test 🔗 Server IP : 192.168.1.55 rver Port : 7000

The featured settings on the Properties tabbed page are:

Setting	Description	Default
Metadata source Enable	Enables/disables the metadata source.	Selected (Enabled)
Plugin type	 Delivers the type of the plugin. The plugin is a module to enable the data exchange between the Metadata Server and the metadata source 	
Source type	Delivers the type of the metadata source.	
Name	Sets the name of the metadata source.	"metadata source #"
Description	Provides a brief description of the metadata source for	

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the better identification of it.

The other information will be different base on different metadata server.

10.1.3.7.2 Channel Overview

The "channel" means a "metadata channel" through which the metadata source streams the data to the Metadata Server. The Channel Overview tabbed page is featured for users to get a general view of such metadata channels.

To access the Channel Overview tabbed page for the metadata source:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the Metadata Server to which the metadata source to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **metadata source** to configure while the other tabbed pages are hidden by default.

• 😒	et t o		Live View Playback Config
	Image: Sever Image: Sever	Metadata Source: Plugin type: Source type:	x: TCP Client x: TCP Client x: [Take_POS
	io device (2) ⇒ ∰. Metadata Server ⇒ NVR Metadata Server ⇒ <u>Matrix</u> → <u>Matrix</u> → <u>Matrix</u> → <u>Matrix</u> → <u>Matrix</u> → <u>Matrix</u>	Connection test: TCP Server IP : TCP Server Port :	192.168.1.55

The Properties tabbed page opens in the Configuration Pane.

3. Click the Channel Overview tab.

The Channel Overview tabbed page then opens.

The Channel Overview tabbed page opens in the Configuration Pane to configure the selected metadata source.

The featured settings on the **Channel Overview** tabbed page are:

Setting	Description	Default
	Select the drop-downs All, None or Invert to select all metadata channels , deselect all metadata channels or reverse the selection.	
Enable	 Delivers whether the metadata channel is enabled or disabled at the moment. Enables/disables the metadata channel. 	Enable
Channel Type	Delivers the type of the metadata channel.	
Channel Name	 Delivers the name of the channel. See also the <u>Properties</u> tabbed page of a metadata channel. 	
Filter Name	Delivers the name of the filter. See also the <u>Filter</u> tabbed page of a metadata channel .	
Description	 Deliver the description of the channel. See also the <u>Properties</u> tabbed page of a metadata channel. 	

10.1.3.7.3 Event Action

It relies on the **Event Action** tabbed page to enable/disable the event(s) that will launch action(s) from the **metadata source**, which is when the connection to the **Metadata Server** is lost.

To access the Event Action tabbed page for the metadata source:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the Metadata Server to which the metadata source to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the metadata source to configure while the other tabbed pages are hidden by default.

۲	र् <u>व</u> :	Live View Playback Config
	Image: WVR Management Server Image: Ecording Server Image: Ecordi	Properties Channel Overview Event Action Metadata Source: Enable Plugin type: TCP Client Source type: TCP Client Name: fake_POS Description:
	io device (2) ☐ ∰. Metadata Server ☐ ∰. NVR Metadata Server ☐ ∰. faite_POS ☐ ∰. Matrix ☐ ∰. NuMatrix A 	Connection test TCP Server IP : 192.168.1.55 TCP Server Port : 7000

The Properties tabbed page opens in the Configuration Pane.

3. Click the **Event action** tab.

The **Event action** tabbed page then opens.

The **Event Action** tabbed page opens in the **Configuration Pane** to configure the selected **metadata source**.

	Live View Playback Config	-	5	x
Properties Channel Overview Eve	the second secon			
Event				
	Related Action 🖌 Sec. 🖌 Action List			
+ - 🖊 🖫				

The featured settings on the **Event Action** tabbed page are:

Group	Icon / Setting	Description		
	+	 Adds an event. The available event is Connection lost, which means the metadata source loses the connection to the Metadata Server. 		
	—	Deletes the selected event.Click any of the event info cells to select the event.		
	۲	Edits the selected event.Click any of the event info cells to edit the info.		
	G I	Copies the event setting to another device .		
	Event Name	Delivers the name of the event.Click the Event Name cell to edit the name of the event.		
Event	Event	 Delivers the event type. Only one type is available: Connection lost, which means the metadata source loses the connection to the Metadata Server. 		
	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>. 		
	Stop Related Action	Sets whether to stop the action launched by the metadata source sometime after the event occurs.		
	Sec.	Sets when to stop the action launched by the metadata source after the event occurs. 1 to 60 seconds are configurable. 		
	Action list	 Delivers all the actions set up for the metadata source to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound. 		
Add schedule	+	Adds a schedule. Available options are the schedules created as described in 		

		Create A Schedule.
	—	Deletes the selected schedule . Click a schedule to select it.
	۲	Edits the selected schedule . Click a schedule to select it.
	1	Moves the selected schedule up. Click a schedule to select it.
	Ŧ	Moves the selected schedule down. Click a schedule to select it.
	髝	Opens a schedule overview dialog that shows the applied schedule(s) in a daily view or a weekly view.
	1	Copies the schedule setting to another event.
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule.
	Property	Sets whether to allow or block the applied schedule 's time period(s).
	Description	Delivers a brief description for this schedule for the easier identification of it.
	Action List	 Delivers all the actions set up for the metadata source to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound.
Add action	+	 Adds an action for the metadata source to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound.
	—	Deletes the selected action. Click an action to select it.
Action prope	erties	 Sets whom to send the alert email(s) to. Sets which digital output pin to turn on. Sets which associated camera to go to the "preset point". This group of settings is available only when any of the available actions is added.

10.1.3.7.4 Add A Metadata Channel

To add a metadata channel:

- 1. From the **Tree Console**, click the topic **Metadata Server**.
- 2. Click the Metadata Server to which the metadata source to configure belongs.

To add a metadata channel to becomes highlighted.

3. From the bottom of the **Tree Console**, click the add icon +.

A tiny dialog then opens showing the options to add a metadata channel.

A new **metadata channel**, named "metadata channel" by default will be appended under the selected **metadata source**, and a **Properties** tabbed page will open in the **Configuration Pane** for users to configure the newly added **metadata channel**.

- To configure a **metadata channel**, see <u>Configure A Metadata Channel</u>.
- To delete a **metadata channel**, see <u>Delete A Metadata Channel</u>.

10.1.3.7.5 Delete A Metadata Channel

To delete a metadata channel from a metadata source:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the topic metadata source.

All the existing metadata source(s) collapse under the Metadata Server.

- 3. Find the **metadata source** to delete the **metadata channel** from.
- 4. If a plus sign (+) shows besides the **metadata source**, click the plus sign (+) to collapse the existing **metadata channel(s**). Then click the channel to delete.

OR

If a minus sign (-) shows besides the **metadata source**, the existing **metadata channel(s)** collapse already. Simply click the channel to delete.

The metadata channel to delete becomes highlighted.

5. From the bottom of the **Tree Console**, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.



- 6. Click **Yes** to confirm the deletion.
- 7. Click the **apply button** on the **Top Toolbar** to apply the change.

10.1.3.7.6 Configure A Metadata Channel

To configure a Metadata Channel:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the topic metadata source.

All the existing metadata source(s) collapse under the Metadata Server.

 If a plus sign (+) shows besides the metadata source (the POS device) to configure, click the plus sign (+) to collapse the existing metadata channel(s). Then click the metadata channel to configure.

OR

If a minus sign (-) shows besides the **metadata source** (the POS device) to configure, the existing **metadata channel(s)** collapse already. Simply click the **metadata channel** to configure.

The **metadata channel** to configure becomes highlighted and the **Properties** tabbed page opens in the **Configuration Pane** while the other tabbed pages are hidden by default.



The metadata channel to configure becomes highlighted.

- See <u>Properties</u> for the settings featured on the **Properties** tabbed page.
- See <u>Filter</u> for the settings featured on the **Filter** tabbed page.

- See <u>Metadata Display</u> for the settings featured on the Metadata Display tabbed page.
- See <u>Event Action</u> for the settings featured on the **Event Action** tabbed page.

10.1.3.7.6.1 Properties

It relies on the **Properties** tabbed page to configure the properties of a **metadata channel**:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the topic metadata source.
- 3. Click the metadata source to which the metadata channel to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **metadata channel** to configure while the other tabbed pages are hidden by default.

The metadata channe	adata channel to configure becomes highlighted.				
The	Properties tabbed page opens in the Configuration Pane.				
ور ب ^و کري	Live View Playback Config	_ & X			
Control of the second sec	Properties Fiter Metadata Display Event Action Metadata Channel	ŝ			

Take a closer look at the user interface.

	Live View Playback Config	_ & ×
Properties	Filter Metadata Display Event Action	
Metadata Channel:	🖉 Enable	
Name:	fake pos	
Description:		
Streaming schedule:	Time zone of Metadata Server (NVR Metadata Server): UTC + 08 : 00	
	Priority Schedule Name 🖍 Property 💦 🖍 Description	
	1 Always Connect	
	+ - * + +	
Retention day:	Recycle by retention day. 7 🖨 day(s)	

Group	Setting	Description	Default
Metadata chai	nnel	Enables/disables the metadata channel.	Selected (Enabled)
Name		Names the metadata channel .	"metadata channel"
Description		Provides a brief description of the metadata channel for the better identification of it.	
	Schedule Name	 Assigns a schedule (profile) to the metadata channel to define the time period(s) for the metadata channel to connect to the network or disconnect from the network. Delivers the name of the schedule currently applied to the register channel. 	the Always schedule
	Properties	Sets when to connect the metadata channel to the network or when to disconnect the metadata channel from the network.	Connect
	Description	Delivers a brief description of the schedule (profile).	the "test description"
Character	+	Applies another schedule to the metadata channel.	
Streaming schedule	_	Withdraws a schedule from a metadata channel.	
	•	 Edits the currently applied schedule(s): 1. Replaces a currently applied schedule with another schedule. 2. Changes the schedule Property to Connect or Disconnect. Click the item to edit and then click the series icon to make the item editable, or simply double-click the item to make it editable.) 	
	1	Moves the selected schedule up.	
	₽	Moves the selected schedule down.	
	Retention day	Sets how long to keep the metadata for.	7 days

The featured settings on the **Properties** tabbed page are:

10.1.3.7.6.2 Filter

The "Filter" means the data filtered from a "metadata channel" through which the metadata source streams to the Metadata Server.

To access the **Filter** tabbed page for the **metadata channel**:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the topic **metadata source**.
- 3. Click the metadata source to which the metadata channel to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **metadata channel** to configure while the other tabbed pages are hidden by default.

	т	he Properties tabbed page opens in the Configuration	
€ ب	45	Live View Playback Config	×
••	ः * ©	Live view Prayoack Coning	
! X ?=	GriveR Management aver GriveR works Recording Stever GriveR Record by Server GriveR Record by Server Grive Strate GriveStrate Gr	Fiter Metadata Display Metadata Channet Channet Name: Enable Description:	
	K VID Star market Kaliva	Streaming schedule Time zone of Metadata Server (MVR Metadata Server) UTC + 08 : 00 Phionity Schedule Name of Property of Description 1 Always Connect +	ŝ

The **metadata channel** to configure becomes highlighted.

4. Click the Filter tab.

The **Filter** tabbed page then opens.

	The Filter tabbed page opens in the Configuration Pane to configure the selected metadata channel .
¢.¢	_ 5" X
A Vite Supermarket A Vite Supermarket A Matrix B desce B desce B desce A Matrix A Matrix B A Matrix B	Proputies Fater Metaddata Display Event Action Filter name Filt
t − 21 P a	+ - / A +

Take a closer look at the user interface.

		-	_ & X
Live View Playback Config			
Properties Filter Metadata Display Event Action Choose filter: filter (5) Filter name: filter (5) Encoding option: ASCII Transaction timeout: 10 = sec.			
Data filter definition: P P P P P P Original data:	Filtered data:		
$\label{eq:source} \begin{tabular}{lllllllllllllllllllllllllllllllllll$	- Start - APPLE JUICE \$48 TX ORANGE JUICE COKE Egg Bread Tea Whisky \$1300 TX TOTAL \$5250 - End- - Start -	\$66 TX \$67 TX \$30 TX \$70 TX \$20 TX	
	APPLE JUICE \$99 TX ORANGE JUICE COKE	\$49 TX \$15 TX	J
┙╬ ★ ┡ 単			
Filter configuration:			
Priority Action type 🖍 Match option 🖍 Data 🖍 Result			/
1 Start Plain text ===== Start -			
2 End Plain text ===== End -			
+ - ≠ ±			

The featured settings on the Filter tabbed page are:

Group	Setting	Description		Default
		Assigns a filter for	the metadata channel.	
	Info		Description	
		+	Add new filter	
Choose filte	r	—	Delete selected filter.	
		7	Import filter.	
		र	Export filter.	
Filter Name		Names the filter.		"filter (1)"
Encoding option		Assigns an encoding option for the filter.		ASCII
Transaction timeout		Sets when to timeout the transaction.		10 sec.
Data filter		Catch data from th	ne server	
definition	5 .]	Clear data		

	•	Import data	
		Export data	
	Original data	The original data from metadata channel.	
	Filtered data	The filtered data.	
	I L	set start	
	±I	end	
	×	omit	
	tot a	substitute	
	ц	change to new line	
	Action type	Assigns an action to the filter .	
	Priority	Sets the priority for an action.	
	Match option	 Assigns a match option to the filter. Three types are available: Plain test, wildcard and regular expression. 	
	Data	Delivers the data be matched for the filter .	
	Result	Delivers the result be matched for the filter.	
Filter	+	Applies another action to the filter .	
Configuration	-	Withdraws an action from the filter .	
	/	 Edits the currently applied filter(s): 1. Replaces a currently applied filter with another filter. 2. Changes the filter Action Type, Match option, Data and Result. Click the item to edit and then click the sicon to make the item editable, or simply double-click the item to make it editable.) 	
	★	Moves the selected action up.	
	Ŧ	Moves the selected action down.	

10.1.3.7.6.3 Metadata Display

It relies on the **Metadata Display** tabbed page to set how to show the metadata onscreen.

To access the Metadata Display tabbed page for the metadata channel:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the topic **metadata source**.
- 3. Click the metadata source to which the metadata channel to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **metadata channel** to configure while the other tabbed pages are hidden by default.

The **metadata channel** to configure becomes highlighted.

		The Propert	ies tabbed page opens in the Configuration Pane .	
_			-	ъх
•	<u>ت</u> په		Live View Playback Config	
.	G. MAR Management S G. Recording Server G. Ruk Record G. Kur Recor) Server Mi name Mi name n name	Filter Metadata Display Event Action Hadata Channel @ Enable Name: fiste pos Description:	
	🗆 🦪 Metadata Serva	7	1 Aways Connect	
	NVR Metadal Ne lang voi		+ ─ // ↑ ↓ Retantion day: □ Recycle by retention day: [7] g day(s)	iii

4. Click the Metadata Display tab.

The Metadata Display tabbed page then opens.

The **Metadata Display** tabbed page opens in the **Configuration Pane** to configure the selected **metadata channel**.

			_ & ×
3	et 10		Live View Playback Config
	Image of the server Image of the server	Properties Fiter Mer Metadata sample string: Transaction start- 2011/01/01 Sat	Eve View Playback Control
	The New Medicable Server	Metadaa OSD. Font Talioma Fontsize: 10 Bold: 📽 Enabl Font color: 🗋	
		Font edge color:	arrency: 0 200 (0-255)
			ansaction display after 10 B sec timeout
	ר בי אין אין אין אין אין אין אין אין אין אי		n transaction display until next transaction comes
Date: 2013	08/16 Time: 19:54:56 Username: admin Server addres	s: 192,168,1.59:5250 CPU loading: 1%	

Take a closer look at the user interface. The **Metadata Display** tabbed page shows a screen simulation at the top to set where to show the metadata onscreen. Click and drag the rectangle where the metadata sample text is to set the location for the metadata onscreen. And click and drag the eight nodes of the rectangle to resize the rectangle.

	Live view Playback	Config		_ & X
Properties Filter Metadata sample string: -Transaction start- 2011/01/01 Sat:	n 🗋 n	Click and drag the lodes of the rectangle o resize the rectangle	The simulated screen	
Metadata OSD:				- 1
Font	Tahoma 👻			
Font size:				
	Z Enable			
Font color:				
Font edge color:				
Background color:	Transparency:O	209 (0-255)		
Associated Camera:	Vito Supermarket 🗸			
Associated Camera display:	Enable			
Display timeout:	Clear transaction display after 🛛 🔋 s	ec timeout		
	Remain transaction display until next trans	saction comes		Ţ

Other featured settings are:

Setting	Description	Default
Font	Sets the font for the onscreen metadata	Tahoma
Font size	Sets the font size for the onscreen metadata.	10
Bold Enables/disables bold tont or the onscreen metadata		Deselected (Disabled)
Font color	Sets the font color for the onscreen metadata.	black
Font edge color	Sets the outline color for the font of the onscreen metadata.	white
Background color	 Sets the border color for the onscreen metadata. Use the slide bar to adjust the transparency of the border color. 	blue
Associated Camera	Associates the metadata setting with a video device.	None
Associated Camera display	Enables/disables showing the metadata with associated camera on Live view.	Selected (Enabled)
Display timeout	Enables/disables clear transaction display after sec.	Clear transaction

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timeout, or remain transaction display until next transaction comes. ► Enable the timeout to be able to set the timeout in the sec field. display after 10 sec. timeout.
--

10.1.3.7.6.4 Event Action

It relies on the **Event Action** tabbed page to set the events that launch action(s) from the **metadata channel**.

To access the Event Action tabbed page for the metadata channel:

- 1. From the Tree Console, click the topic Metadata Server.
- 2. Click the topic **metadata source**.
- 3. Click the metadata source to which the metadata channel to configure belongs.

The **Properties** tabbed page opens in the **Configuration Pane** for the **register channel** to configure while the other tabbed pages are hidden by default.

The metadata channel to configure becomes highlighted.

		The Proper	ties tabbed page opens in the Configuration Pane.	
• چ	ा ' ठ		Live View Playback Config	-г X
	: : : : : : : : : : : : : : : : : : :	20 ng autname 20 Asion Asion permarket	Filter Metadata Display Event Action stadata Channel @ Enable Name: fike pos Description:	
		se ze 72) Justa Server Los e pool	Priority Schedule Name / Property / Description 1 Always Connect	Ē

4. Click the **Event Action** tab.

The **Event Action** tabbed page then opens.

The Event Action tabbed page opens in the Configuration Pane to configure the selected metadata channel.

_						
~ چ	د په			Live View P	back	_ 공 X
	MVR Management Server B. Recording Server B. NVR Recording Server B. VNR Recording Server G. Recording	Properties Filt		adata Display Event A	cuon	
_ ₹	··· 🤕 default name	Event				
L~•		Event Name	Schedule	Stop Related Action	/ Sec. /	Action List
X	··· 🖙 default name	Apple	Always, Al	Stop action after		
	15 DIDO ⊞ & Immervision		Always	Stop action after		Video edge display, Go to Preset
		Transaction started Transaction stopped User defined 04 User defined 05 User defined 05 User defined 06 User defined 07 User defined 07				11926 I. Jakoo Castana disemenadade 200 km
Date: 2013	/08/16 Time: 19:55:10 Usemame: admin Server address:	192.168.1.59:5250 CPUI	loading: 0%	Memory usage: Total 812	SMB Free	7129MB Network: Displayed streaming bit rate 0.00 kbps

Take a closer look at the user interface.

	Live View Playback	_ 占 ×
Properties Filter M	etadata Display Event Action	
Event		
Event Name Schedule	Stop Related Action 🖋 Sec. 🖉	Action List
Apple Always, Al	Stop action after 30	
123 Always	Stop action after 30	Video edge display, Go to Preset
Transaction started Transaction stopped User defined 03 User defined 04 User defined 05 User defined 06 User defined 07 User defined 08 User defined 09 User defined 10		

The featured settings are:

Group	Icon / Setting	Description
	+	 Adds an event. Available events are Transaction started, Transaction stopped and other user definable events. Select User define # to create an user-defined event. See User defined configuration settings to know the how to create a user-defined event.
	_	Deletes the selected event.Click any of the event info cells to select the event.
	۲	Edits the selected event. Click any of the event info cells to edit the info.
	G	Copies the event setting to another metadata channel.
Event	Event	 Delivers the event type. The available types are: Transaction started, Transaction stopped and up to seven other user definable events Select User define # to create an user-defined event. See User defined configuration settings to know the how to create an user-defined event.
	Schedule	 Delivers the applied "schedule", which means one or more time period(s) in which the occurrence of the event is taken effective. Use the Add schedule settings to apply a schedule to the event. To create/delete/edit a schedule, see <u>Schedule</u>.
	Stop Related Action	Sets whether to stop the action launched by the metadata channel sometime after the event occurs or leaves it on automatic.
	Sec.	Sets when to stop the action launched by the metadata channel after the event occurs. 1 to 60 seconds are configurable.
	Action List	 Delivers all the actions set up for the metadata channel to take when the event occurs. The available actions are E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound.
	+	 Adds a schedule. Available options are the schedules created as described in <u>Create</u> <u>A Schedule</u>.
	-	Deletes the selected schedule . Click a schedule to select it.
		Edits the selected schedule . Click a schedule to select it.
	Ť	Moves the selected schedule up. Click a schedule to select it.
Add schedule	₽	Moves the selected schedule down. Click a schedule to select it.
	謪	Opens a schedule overview dialog that shows the applied schedule(s) in a daily view or a weekly view.
	L	Copies the schedule setting to another event.
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule.
	Property	Sets whether to allow or block the applied schedule 's time period(s).
	Description	Delivers a brief description for this schedule for the easier identification of it.

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	Action List	 Delivers all the actions set up for the metadata channel to take when the event occurs. Available actions are E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound.
Add action	+	 Adds an action for the metadata channel to take when the event occurs. Available actions are: E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound.
	—	Deletes the selected action. Click an action to select it.
Action properties		 Sets whom to send the alert email(s) to (for Email to multiple). Sets which digital output pin to turn on (for DO turn on). Sets associated camera to go to the "preset point" (for Go to Preset). This group of settings is available only when any of the available actions is added.

10.1.3.7.6.4.1 User defined configuration settings

It relies on the **user defined configuration settings** to tailor-create an **event** that meets your needs to launch action(s) from the **metadata channel**.

To access the user defined configuration settings:

- 1. Open the **Event Action** tabbed for the **register channel** to configure as described in <u>Event Action</u>.
- 2. Click the add icon +.
- 3. From the drop-downs that show, select any of the User define #.

The user defined configuration settings then become available.

		_ & ×
• چ	et ' e	Live View Pla Jack Config
! *	Bo NVR Management Server B Recording Server B NVR Recording Server B NVR Recording Server	Properties Filter Metadata Display Event Act
\mathbf{X}	S. NVR Metadata Server	Event Arristic Stop Related Action 🖌 Sec. 🖊 Action List
	🛛 🏥 Maeux	Event Kasme Schebule Solge Kelaleo Addin / Sec. / Action List Apple Always, Al Stop action after 30
	₽, NuMatrixA ₽, NuMatrixB	+ - / G
		User defined configuration setting
		Event name. Apple
		Event condition
		• Text 123
		Match whole word
		🗇 Match case
		Advance setting
		Wildcard
		Regular expression
		Number
		Pretix text
		Condition · · 0 · · · ·
		Frequency
		Count >= 1
		Count period:
		Keyword happens within 1 # transaction(s)
		🕐 Keyword happens within 0 関 day 0 🚦 hour 10 🗒 min
	+- 💷 🔎 🗧	
Date: 2013	/08/19 Time: 08:42:40 Username: admin Server address:	192 168.1.59:5250 CPU loading: 0% Memory usage: Total 8128MB Free 7171MB Network: Displayed streaming bit rate 0.00 kbps

The **User defined configuration settings** shows to tailor-create an **event** for the selected **metadata channel**.

Take a closer look at the user interface.

	_ & ×
Live View Playback Config	
Properties Filter Metadata Display Event Action	
User defined configuration setting	
Event name: 123	
Event condition	
Text 123	
Match whole word	
Match case	
Advance setting	
Wildcard	
Regular expression	
Number	
Prefix text.	
Condition: = 👻 0 🛱 and 👻 0	
Postfix text	
Frequency Count >= 1	
Count period:	
Keyword happens within 1 = transaction(s)	
Keyword happens within 0 🖶 day 0 🖶 hour 10 🖶 min	
Add schedule	
Time zone of Metadata Server (NVR Metadata Server): UTC + 08 : 00	
Priority Schedule Name 🖋 Property 🖋 Description	
1 Always Allow	
$+ - \nearrow + \downarrow$	🛱 🛂 💡

The featured settings are:

Group	Icon / Setting	Description			
Event r	name	Names the event to create.			
		 Edits the keyword for the event to match. Three types are available: Match whole word, match case and advanced setting. 			
		Info	Description		
	Text	Match whole word	Searches the terms as a whole word.		
		Match case	Searches names where the case matches the letters.		
Event condition		Advanced setting	Include wildcard and regular expression.		
		Edits the numbe	r for the event to match.		
		Info	Description		
	Number	Prefix text	Edits special text before the value's condition.		
	Number	Condition	Edits a number as the condition of event and select one of the symbols (<=, <, =, >, >=) to define the numeric value.		
		Postfix text	Edits special text after the value's condition.		
Frequency	Count>=	Edits the event trigger times over specific numbers.			

User Manual

		Edits count period for the event.		
		• Two count periods are available: Keyword happens within		
		transaction(s) or keyword happens within day		
	Count period	hourmin.		
		1 to 999 transaction(s) are configurable.		
		0 to 5 day(s), 0 to 23 hour(s), 0 to 59 min(s) are		
		configurable.		
	+	 Adds a schedule. Available options are the schedules created as described in <u>Create A Schedule</u>. 		
	—	Deletes the selected schedule.Click a schedule to select it.		
	۲	Edits the selected schedule . Click a schedule to select it. 		
	Ť	Moves the selected schedule up. Click a schedule to select it. 		
Add schedule	ŧ	Moves the selected schedule down. Click a schedule to select it. 		
	鹊	Opens a schedule overview dialog that shows the applied schedule(s) in a daily view or a weekly view.		
	G	Copies the schedule setting to another event.		
	Schedule Name	 Delivers the name of the schedule. Click the Schedule name cell to change the schedule to some other schedule. 		
	Property	Sets whether to allow or block the applied schedule 's time period(s).		
	Description	Delivers a brief description for this schedule for the easier identification of it.		
	Action List	 Delivers all the actions set up for the metadata channel to take when the event occurs. Available actions are E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound. 		
Add action	+	 Adds an action for the metadata channel to take when the event occurs. Available actions are: E-Mail to multiple, DO turn on, Go to Preset, Video edge display and Play alert sound. 		
	-	Deletes the selected action.Click an action to select it.		
Action properties		 Sets whom to send the alert email(s) to (for Email to multiple). Sets which digital output pin to turn on (for DO turn on). Sets associated camera to go to the "preset point" (for Go to Preset). This group of settings is available only when any of the available actions is added. 		



The value is also case sensitive, you must key in "," symbol to search for 10,000US.

10.1.4 Configure Matrix

A **Matrix Server** is a server right under the control of the Management Server to enable an unlimited number of video walls and video displays, with up to 100 channels displayed per monitor. Configure the **Matrix** to customize your video wall application.

1. Install NuMatrix. For Numatrix installation, please refer to NuMatrix.

To access the **Matrix** settings:

 Access the Physical Config ("physical configuration") as described in <u>Physical</u> <u>Config (Management Server)</u>.

The physical configuration opens onscreen, and the **Tree Console** shows the three sub topics: **Recording Server**, **Metadata Server**, and **Matrix**.



3. If a plus sign (+) shows besides the sub topic **Matrix**, click the plus sign (+) to collapse the existing **Matrix**(s). Then click the **Matrix** to configure.

OR

If a minus sign (-) shows besides the sub topic Matrix, the existing Matrix

Server(s) collapse already. Simply click the Matrix to configure.

The **Properties** tabbed page then opens at the **Configuration Pane** to configure the selected **Matrix Server** while the other tabbed page is hidden.

	The Properties tabbed page opens in the Configuration Pane to configure the selected Matrix Server .
ې کې	Live View Playback Config
	Performan Internation Display Internation Display Internation Display Performan Internation Display Performan

4. Access one of these tabbed pages to configure the **Matrix**.

A function overview of these tabbed pages:

Tab	Description			
Properties	 Names the Matrix Server. Enters a brief description of the Matrix for the better identification of it. Sets the IP and port for the Matrix Server. Run a test on the connection to the Matrix Server. Sets the monitor number for Matrix Server. See <u>Properties</u> for the settings. 			
Information Display	 Configures which information to show on the screens of the video wall, including the grid number, server name, device name, camera name, camera bit rate, camera frame rate, date and time. See <u>Information Display</u> for the settings. 			



Please note that only when have an "Ultimate level" license will you be able to see the Matrix interface.

10.1.4.1 Properties

It relies on the **Properties** tabbed page to enter the information about the **Matrix Server** including the name and description, or to run a test on the connection to the **Matrix Server**.

To access the **Properties** tabbed page of the **Matrix Server** to configure:

1. From the Tree Console, click the topic Matrix.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

	The Properties tabbed page opens in the Configuration Pane to configure the selected Matrix Server .			
⊘ ▼ a' ⊐	Live View Playback Config			
B. tVRR Management Server B. Recording Server B. Recording Server B. Recording Server B. Res Vella 22112251 B. Kes Vella 2211251 B. Kes Vella 2211251 B. Kes B. Mattin Server B. Mattin Server B. Mattin Server B. James 29 James 2 B. Kes B. Kes B. Kes B. James 2 B. Kes B. Kes	Properties Information Display Name: jobn: Description: Pr: 192.168.2.85 Port 5360 Nontor number: 1			

Take a closer look at the user interface.

		Live View Pla	ayback	Config			 F X
Properties	Information Display						
Name:	NuMatrix A)				
Description:							
IP:	192.168.1.55)				
Port	5350		9				
Monitor number:	2)				
The featured settings on the **Properties** tabbed page are:

Setting	Description	Default
Name	Names the Matrix Server.	"matrix"
Description	Provides a brief description for this Matrix Server for the easier identification of it.	
IP	Sets the IP address of the Matrix Server.	127.0.0.1
Port	 Sets the port for the Matrix Server. Click the icon to run a test on the connection to the Matrix Server. 	5350
Monitor number	Sets the number of the monitor(s).	1



Please note that only when have an "Ultimate level" license will you be able to see the Matrix interface.

10.1.4.2 Information Display

It relies on the **Information Display** tabbed page to configure which information to show on the screens of the video wall, including the grid number, server name, device name, camera name, camera bitrate, camera frame rate, date and time.

To access the Information Display tabbed page of the Matrix Server to configure:

1. From the Tree Console, click the topic Matrix.

By default, the **Properties** tabbed page then opens at the **Configuration Pane**.

The **Properties** tabbed page opens in the **Configuration Pane** to configure the selected **Matrix Server**.

		_ 8 ×
•	Live View Playback Config	
	Name. jphn: scripton pr. 192.562.285 Pot. 5500 Pot. 5500 Pot. 1	

2. Click the Information Display tab.

The Information Display tabbed page opens.

	Live View	Playback	Config			×
Properties Information Display						
Show content title						
🗹 Grid number						
Server name						
Camera name						
Camera bit rate						
Camera frame rate						
Date						
🛃 Time						

Setting	Description	Default
Show content title	Selects/deselects all the information to show on the screens of the video wall, including the grid number, server name, camera name, camera bit rate, camera frame rate, date and time.	"Selected" (All information is enabled.)
Grid number	Enables/disables grid number info on the screens of the video wall.	"Selected" (Enabled)
Server name	Enables/disables server name info on the screens of the video wall.	"Selected" (Enabled)
Camera name	Enables/disables camera name info on the screens of the video wall.	"Selected" (Enabled)
Camera bit rate	Enables/disables showing the camera bit rate on the screens of the video wall.	"Selected" (Enabled)
Camera frame rate	Enables/disables showing the camera frame rate on the screens of the video wall.	"Selected" (Enabled)
Date	Enables/disables date info from Matrix Server on the screens of the video wall.	"Selected" (Enabled)
Time	Enables/disables time info from Matrix Server on the screens of the video wall.	"Selected" (Enabled)

10.1.4.3 Add A Matrix

To add a Matrix Server to the Management Server:

1. Access the **Physical Config** ("physical configuration") as described in <u>Physical</u> <u>Config (Management Server)</u>.

The physical configuration opens onscreen, and the **Tree Console** shows the three sub topics: **Recording Server**, **Metadata Server**, and **Matrix**.



2. Click the sub topic Matrix.

The sub topic Matrix becomes highlighted.

3. From the bottom of the **Tree Console**, click the add icon +.

A new **Matrix Server**, named "matrix (#)" by default will be appended under the sub topic **Matrix**, and a **Properties** tabbed page will open in the **Configuration Pane** for users to configure the newly added **Matrix Server**.

NUUO Crystal 2.0

The new Matrix Server is appended to the sub topic Matrix Server.

		The I	Properties tabl	oed page opens	in the Confi	guration Pane.	
•	of ta			Live View	Playback Config		×
.	2000	imes2 atrix (2)	Propieter Inform	64.2.85			

10.1.4.4 Delete A Matrix

To delete a Matrix Server from the Management Server:

 Access the Physical Config ("physical configuration") as described in <u>Physical</u> <u>Config (Management Server)</u>.

The physical configuration opens onscreen, and the **Tree Console** shows the three sub topics: **Recording Server**, **Metadata Server**, and **Matrix**.



2. If a plus sign (+) shows besides the sub topic **Matrix**, click the plus sign (+) to collapse the existing **Matrix**(s). Then click the **Matrix** to delete.

OR

If a minus sign (-) shows besides the sub topic **Matrix**, the existing **Matrix**(s) collapse already. Simply click the **Matrix** to delete.

3. From the bottom of the **Tree Console**, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.

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- 4. Click **Yes** to confirm the deletion.
- 5. Click the **apply button** on the **Top Toolbar** to apply the change.



Please note that only when have an "Ultimate level" license will you be able to see the Matrix interface.

10.2. System Configuration

System Config is the short form for "system configuration", which means configure Management Server basic profile setting such as user group, role, schedule and layout.

To access the System Config ("system configuration"):

Open the NuClient settings as described in <u>Settings</u>. 1.

The NuClient settings open.

2. Click the **System Config** icon **K** from the **Config Catalog**.

The system configuration then opens onscreen and shows the User Group settings by default (when the NuClient is used for the first time).



The system configuration features four topic settings –User Group, Role, Schedule & Layout, which are summarized as following:

Setting	Description		
User Group	 Manages and configures the "user groups" Assigns a Role to a user group. Defines the user classification, privilege and the Login Schedule for a user group and apply to the users belong to the user group. See User Group for the settings. 		
Role	Defines the user authentication which include privilege (permitted action(s) to take) and Permission (the permitted device(s) to access) and for a user group and user . See <u>Role</u> for the settings.		
Schedule	Defines one or more periods of time to launch some actions from the Management Server. See <u>Schedule</u> for the settings.		
Layout	 Arranges the video grid that tiles multiple video channels together for view and Matrix. See Layout for the settings. 		

10.2.1. User Group

The User Group is a group of settings to manage and configure the "user group(s)" and assigns a Role to a user group and user. These settings also define the user classification, privilege and the Login Schedule for a user group and apply to the users belong to the user group. The Login Schedule defines the allowed time for a user of a user group to log in the system. See also <u>Role</u> and <u>Schedule</u>.

10.2.1.1. The User Interface

To understand the user interface of the **User Group** settings:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **X** from the Config Catalog.

The **Tree Console** then shows four setting groups: **User Group**, **Role**, **Schedule**, and **Layout**.



And the User Group setting group will expand four pre-configured user groups:



Among the pre-configured **user groups**, **User Group – Admin** cannot be deleted while the other three are subject to change and deletion. See <u>Configure A User Group</u> to edit a **user group** and see <u>Delete A User Group</u> to delete a **user group**.

Save for the pre-configured ones, you can freely add your own **user groups** to the software. To add a **user group**, see <u>Create A User Group</u>.

2. From the **Tree Console**, click the topic **User Group**.

The **Overview** tabbed page then opens at the **Configuration Pane** to deliver a general view of all the existing **user groups**.



Take a closer look at the user interface. The **Overview** tabbed page actually shows all the existing **user group(s)**, with the info about the member(s) of the **user group**.



10.2.1.2. Access User Group Settings

To access the User Group settings:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the



The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the topic **User Group**.

The **Overview** tabbed page then opens at the **Configuration Pane**.



10.2.1.3. Create A User Group

To create a **user group**:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **K** from the Config Catalog.

The **Tree Console** then shows the four groups of settings – **User Group**, **Role**, **Schedule** and **Layout**.

2. Click the topic **User Group**.

The topic User Group becomes highlighted

3. From the bottom of the **Tree Console**, click the add icon +.

A new **user group**, named "user group" by default, is then appended to the topic **User Group**, and a **Properties** tabbed page opens in the **Configuration Pane** for users to configure the newly created **user group**.



To know the settings featured on the **Properties** tabbed page, see <u>Configure A</u> <u>User Group</u>.

10.2.1.4. Delete A User Group

To delete a user group:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **User Group** if there shows a (+) plus sign.

All existing **user group(s)** then collapse under the topic **User Group**, including the software's pre-configured ones and the created ones



3. Click the **user group** to delete.

The **user group** to delete becomes highlighted.



4. From the bottom of the **Tree Console**, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.



- 5. Click **Yes** to confirm the deletion.
- 6. Click the **apply button** on the **Top Toolbar** to apply the change.

10.2.1.5. Configure A User Group

To configure an existing **user group**:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **User Group** if there shows a (+) plus sign.

All existing **user group(s)** then collapse under the topic **User Group**, including the software's pre-configured **user groups** and the created ones.



3. Click the **user group** to configure.

The **Properties** tabbed page then opens at the **Configuration Pane** for the **user group** to configure



The featured settings on the **Properties** tabbed page are:

Setting	Description		Default	
Enable checkbox	Enables/disables	Enables/disables a user group .		
Name	Names the user g	group.	"user group"	
Description		description for this user group for the on of the user group .		
Role	Assigns a role for See also <u>Role</u> .		Role - User	
	The Login sched	ule table features the following settings:		
	Setting	Description	Default	
	Schedule Name	 Assigns a schedule (profile) to the user group to define the allowed time period(s) for the user group to log into the network. Delivers the name of the schedule currently applied to the user group. 	The Always schedule	
	Properties	Allows/blocks the schedule's defined period(s) of time for the user group to log in the network	Allow	
	Description	Delivers the brief description of the schedule (profile).	the "test description"	
	+	Applies another schedule to the user group.		
Login Schedule	_	Withdraws a schedule from a user group.		
		 Edits the selected cell in the Login schedule table: To double-click a cell in the Login schedule table can also edit the cell. The "Description" cells aren't editable. 		
	Ť	Moves the selected schedule up as higher priority.		
	₽	Moves the selected schedule down as lower priority.		
	踐	Opens the Schedule Overview , a general view of the period(s) of time allowed for the user group to log in the network presented in a daily or weekly manner.		

10.2.1.6. Add A User to A User Group

To add a **user**:

1. Run the **NuClient**. Click the **Config** tab from the **Top Toolbar**. Then click the

System Config icon **the Config Catalog**.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the topic **User Group**.

The topic **User Group** then becomes highlighted.

The topic **User Group** then becomes highlighted.

©~ ++ √	Live View Playback Config	_ & X
Losef Group	- Durniew -	
Image: Section - Closer I	User Group-Admin	

3. From the bottom of the **Tree Console**, click the add sign icon **+**.

A new **user**, named "user" by default, is then appended under the topic **User Group**, and a **Properties** tabbed page opens in the **Configuration Pane** for users to configure the newly created **user**.

The **Properties** tabbed page opens in the **Configuration Pane** for the new **user**.

A new **user group** is appended under the topic **User Group.**

The **Properties** tabbed page for the new **user group** opens in the **Configuration Pane**.

ۍ چ	et 10		Live View Playback	_ & X
	4 User Croup 4 User Croup - Adm 5 User Croup - Adm 5 User Croup - Adm 5 User Croup - N 4 User Croup - N 5 User Croup - N 5 User Croup - Su 5 User Croup - Su		Properties Les orution: Change passwort: Change passwort: Change passwort: Property: Follow group property: Contern new passwort: Contern new passwort: Property: Follow group property: Croup: User Group - Guest: Property: Follow and property: Contern new passwort: Property: Follow and property: Croup: User Group - Guest: I on schedule: Time zone of Management Server (MR Management Server): UTC + 08: 00 I new passwort: I new passwort: Logn schedule: Time zone of Management Server): UTC + 08: 00 I new passwort: I new passwort: Logn schedule: Time zone of Management Server): UTC + 08: 00 I new passwort: I new passwort: Logn schedule: Time zone of Management Server): UTC + 08: 00 I new passwort: I n	
Date: 201	+ - ^1	ာ အ		

Take a closer look at the user interface.

	Live View Playback Config
Properties	
User:	Enable
Name:	user_1
Description:	
Change password:	
New password:	
Confirm new password:	
Property.	 Follow group property Group: User Group - Guest Follow own property Role: Role - User Login schedule: Time zone of Management Server (NVR Management Server): UTC + 08 : 00 Priority Schedule Name Property Property Description 1 Always Allow
	+ - / ↑ ↓ ඕ

The featured settings on the **Properties** tabbed page are:

Setting	Description			Default
Enable checkbox	Enables/disa	Selected (Enabled)		
Name	Names the u	ser.		"user"
Description	Provides a b identification	prief description for this use of the user .	er for the easier	
Change password	Change the p	assword for user.		
New password	Provide new	password.		
Confirm new password	Confirm new	password.		
	Assigns a us 2. Follow o Assigns a ro l	roup property er group for the user . wn property le for the user . so <u>Role</u> .		
		chedule table features the fo	llowing settings:	
	Setting	Description	Default	
	Schedule Name	 Assigns a schedule (profile) to the user to define the allowed time period(s) for the user to log into the network. Delivers the name of the schedule currently applied to the user. 	The Always schedule	
Property	Properties	Allows/blocks the schedule's defined period(s) of time for the user to log in the network	Allow	
	Descriptio n	Delivers the brief description of the schedule (profile).	the "test description "	
	+	Applies another schedule to the user .		
	-	Withdraws a schedule from a user .		
	s	Edits the selected cell in the Login schedule table: To double-click a cell in the Login schedule table can also edit the cell. The "Description" cells aren't editable.		
	•	Moves the selected schedule up as higher priority.		

ŧ	Moves the selected schedule down as lower priority.	
譢	Opens the Schedule Overview , a general view of the period(s) of time allowed for the user to log in the network presented in a daily or weekly manner.	

10.2.2. Role

The **Role** is a group of settings to define the permitted action(s) to take and the permitted device(s) to access for a **user group**.

The **role** makes it highly flexible for the user authentication which include privilege (permitted action(s) to take) and permission (the permitted device(s) to access) and for a **user group** and **user**. Users need not configure the devices one by one but only have to apply one or more created **role(s)** to the **user group** and **user**. This can substantially reduce the time to configure the **user groups** and **users**.

10.2.2.1. The User Interface

To understand the user interface of the **Role** group of settings:

 Access the System Config ("system configuration") as described in System Config.

The system configuration opens onscreen, and the **Tree Console** shows four topic settings: **User Group**, **Role**, **Schedule**, and **Layout**.

And the topic setting **Role** will expand four pre-configured **user groups**:



Among the pre-configured **roles**, **Role– Admin** cannot be deleted while the other three are subject to change and deletion. See <u>Configure A Role</u> to edit a **role** and see <u>Delete A Role</u> to delete a **role**.

Save for the pre-configured ones, the **NuClient** users can freely add their own **roles** to the software. To add a **role**, see <u>Create A Role</u>.

2. From the **Tree Console**, click the topic **Role**.

The **Overview** tabbed page then opens at the **Configuration Pane** to deliver a general view of the "privileges" of all the existing **roles**.

			ive Vie	w	Playbi	ack	Co	nfig										
User Group Ser Group - Admin B & User Group - Power User User Group - User	Overview																	
E 🐍 User Group - Guest		S.	Ŀ	Þ	\$	¢.	۰L	∘∟	Ę)	d la	E,	۲	ŧ	₽ º		≵	۴\$	ö
··· 穏, Role - Admin ··· 穏, Role - PowerUser ··· 穏, Role - User	Role - Admin																	
	Role - PowerUser																	
	Role - User																	
🖽 Always 🖽 working day	29 Role - Guest																	
··· 🖬 holiday ··· 🖬 off line hour ··· 🖬 weekend	Role - Finance																	
weekend specific Image: Eavout	Å? role 1	×	~	~	4	~	~	~	~	~	~	٥	~	~	×	×	×	~

-An overview of the roles opens at the Configuration Pane.

Take a closer look at the user interface. The **Overview** tabbed page actually shows all the existing **role(s)**, with the info about their "privileges", which means the allowed/prohibited actions to take for a **role**.



The icons for the allowed/prohibited actions to take have the following meanings:

lcon	Permitted Actions							
S _B	Access the device(s).							
Ę	Views Live view, the instant playback of videos.							
	Views Playback , the playback of recorded videos.							
* •	Searches for metadata transactions.							
	Controls the optical PTZ and focus of cameras.							
÷L,	Controls the "preset point", which means the preprogrammed point of view of a camera.							
° ل	Starts/stops the camera's "patrol", which means a preset path that the camera goes through by schedule.							
Ê	Switches between stream profiles. A "stream profile" is a series of stream settings for mobile clients to stream videos with lower fps. Without such profile, users can neither watch live video on mobile client nor select lower fps stream on the Live View screen. The stream setting can also fix the resolution and frame rate for a camera brand/series.							
J.	Manually starts video recording.							

E.	Exports video and metadata transactions.
\odot	Backs up video and metadata transaction.
Statt Balance	Triggers digital output.
A	Browses events.
	Log export.
*	Edits the configuration.
?	Changes the password.
1 0	Edits the layout of video grid.
	Configures the public view.

10.2.2.2. Access Role Settings

To access the **Role** settings:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The Tree Console then shows four setting groups: User Group, Role, Schedule, and Layout.

2. From the **Tree Console**, click the topic **Role**.

The **Overview** tabbed page then opens at the **Configuration Pane**.

	Click	the topic	c Ro	ole.																	
The	Tree Console			The O	ver	vie	wo	ppe	ns	ati	the	Co	nfi	gu	rati	on	Pa	ne			
	Liser Group Liser Group - Admin Liser Group - Admin Liser Group - Power User Liser Group - User Liser Group - Guest			чен		View		yback		Config		-h-	•		÷	6	*	**	••		
	Ser Group 1 Ser Group 2		2 0	Role - Admin	<i>€</i> _Ĥ	Ŀ		•	<u>بل</u>		<u> </u>	2. <u>6</u>	•		<u>•</u>	<u> </u>	4 9	*	19	1 6	
	Role - Aamin			Role - Power User																	
				Role - User																	
	Role 1 R. Role 2 ⊞ Schedule		29	Role - Guest																	
	Always		8 9	Role 1																	
	··· 🚼 Daily ··· 🚼 Weekly ··· 🚼 monthly 1		â	Role 2		R	R	R	R	R	8	8	R	R	R	8	R	2			
	monthly 2-1 monthly 2-2 monthly 2-2 weath 1-1 weath 1-2 weath 2-2 weath																				
	╋ — 21 105 Time: 14:14:21 Username: a	A to	dress: 0(10 000 000 000 4240 CPU	loading	6% 1.1	temory		Total 8		Free 47		I Netw	ork Do	wnload			pload	19.07 k	bns	

10.2.2.3. Create A Role

To create a Role:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** then shows the four groups of settings – **User Group**, **Role**, **Schedule** and **Layout**.

2. Click the topic **Role**.

The topic Role becomes highlighted

3. From the bottom of the **Tree Console**, click the add icon +.

A new **role**, named "role" by default, will be appended to the topic **Role**, and a **Properties** tabbed page will open in the **Configuration Pane** for users to configure the newly created **role** while the other four tabbed pages - **Privilege**, **Permission**, **Priority** and **Matrix** are hidden by default.



To know the settings on the **Properties** tabbed page, see <u>Properties</u>. To know the settings on the **Privilege** tabbed page, see <u>Privilege</u>. To know the settings on the **Permission** tabbed page, see <u>Permission</u>. To know the settings on the **Priority** tabbed page, see <u>Priority</u>. To know the settings on the **Matrix** tabbed page, see <u>Matrix</u>.

10.2.2.4. Delete A Role

To delete a **role**:

1. Run the **NuClient**. Click the **Config** tab from the **Top Toolbar**. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **Role** if there shows a (+) plus sign.

All existing **role(s)** then collapse under the topic **Role**, including the software's pre-configured ones and the created ones.



3. Click the **role** to delete.

The **role** to delete becomes highlighted.

Click the **role** to delete. Then it becomes highlighted.

€ ح	* *				Live Vie	w Playba	ck Config	,
	🗆 🧸 Role 🦧 Ro	le - Admin	Properties	Privilege	Permission	Priority	Matrix	
X	- 🧸 R(le - User le - Guest	Name: R	ole 2 ole 2 Descriptio	in			
	⊡ ∰ Sched	le 2	Description:	ore 2 Bescriptio				

4. From the bottom of the **Tree Console**, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.



- 5. Click **Yes** to confirm the deletion.
- 6. Click the **apply button** on the **Top Toolbar** to apply the change.

10.2.2.5. Configure A Role

To configure an existing **role**:

1. Run the **NuClient**. Click the **Config** tab from the **Top Toolbar**. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **Role** if there shows a (+) plus sign.

All existing **role(s)** then collapse under the topic **Role**, including the software's pre-configured **roles** and the created ones.



3. Click the **role** to configure.

The **Properties** tabbed page then opens at the **Configuration Pane** for the **role** to configure



To know the settings featured on the Properties tabbed page, see Properties.

10.2.2.5.1. Properties

It relies on the **Properties** tabbed page to set the name and the description of a **role**.

To access the **Properties** tabbed page of a role:

 Open the **Properties** tabbed page of the **role** to configure as described in <u>Configure A Role</u>.

The **Properties** tabbed page opens in the **Configuration Pane**.



The Properties tabbed page opens in the Configuration Pane.

The settings featured on the **Properties** tabbed page are:

Setting	Description	Default
Name	Names the role .	"role"
Description	Provides a brief description for this role for the easier identification of the role .	

10.2.2.5.2. Privilege

It relies on the **Privilege** tabbed page to configure a **role**'s "**privilege**", which means the allowed or prohibited actions to take for a **role**.

To access the **Privilege** tabbed page of a **role**:

 Open the **Properties** tabbed page of the **role** to configure as described in <u>Configure A Role</u>.

The **Properties** tabbed page opens in the **Configuration Pane**.



The Properties tabbed page opens in the Configuration Pane.
2. From the **Configuration Pane**, click the tab **Privilege**.

The **Privilege** tabbed page then opens.



The **Privilege** tabbed page opens in the **Configuration Pane**.

The settings featured on the **Privilege** tabbed page are:

Group	Setting	Description
	Access Device	Views the device(s).
	Live view	Views Live view, the instant playback of videos.
	Playback	Views Playback , the playback of recorded videos.
	Control optical PTZ and Focus	Controls the optical PTZ and focus of cameras.
	Control Preset point	Controls the "preset point", a pre-programmed point of view of a camera.
	Start/Stop Patrol	Starts/stops the camera's "patrol", which means a preset path that the camera goes through has scheduled.
Viewing	Switch stream profile	 Switches between stream profiles. A "stream profile" is a series of stream settings for mobile clients to stream videos with lower fps. Without such profile, users can neither watch live video on mobile client nor select lower fps stream on the Live view screen. The stream setting can also fix the resolution and frame rate for a camera brand/series.
	Start record manually	Manually starts video recording.
	Export video and metadata transaction	Exports video and metadata transactions.
	Backup video transaction	Backs up video transactions.
	Trigger Digital Output	Triggers digital output.
	Browse event	Browses events.

	Search metadata transaction	Searches for metadata transactions.
	Edit configuration	Edits the configuration.
	Change password	Changes the password.
Config	Edit layout	Edits the layout of video grid.
	Configure public view	Configures the public view.
Set Preset point / Patrol		Sets the preset point / patrol

New added devices are default to enable all privileges.

10.2.2.5.3. Permission

It relies on the **Permission** tabbed page to configure a **role**'s "**permission**", which means the allowed or prohibited device(s) to access for a **role**.

To access the **Permission** tabbed page of a **role**:

1. Open the **Properties** tabbed page of the **role** to configure as described in <u>Configure A Role</u>.

The **Properties** tabbed page opens in the **Configuration Pane**.

•	**	Live View Playback Config
	B User Group Role Role - Admin Role - Proc Role - Proc	erties Privilege Permission Priority Matrix
×		ame: Role 2
	Role 1 Role 2 Descri	Role 2 Description
	□ III Schedule III Always 	

The $\ensuremath{\textbf{Properties}}$ tabbed page opens in the $\ensuremath{\textbf{Configuration}}$ $\ensuremath{\textbf{Pane}}.$

н

2. From the **Configuration Pane**, click the tab **Permission**.

The **Permission** tabbed page then opens and shows some settings and all the networked devices.

✓ 0,2	LIN	: View Playback Config
E I User Group - Admin E I User Group - Admin E I User Group - Prever User E I User Group - User	Properties Photoge 2	Pourty Maint
E Liter Group-Liter		\$CD+1.1.10+E0\$
E AL Res	Device permission	
Role-Admin - B. Role-PowerUser	E Mirit Recording Server	
Role-User	Recepton_detault name	
- 75, Role - Gunst - 75, Role - Finance	Reception, detault name	
E Schedule	Receptor, default name	
- III - Aways	- Counting default name	
- III working day - III holiday	Counting_default name	
- III off line hour	- Counting, default name	
- El weekend El specific		Summer and the second s
0 III Layod	- I Immeniation_default name	
- I tayout	Rimmenision_default name	

The Permission tabbed page opens in the Configuration Pane.

Take a closer look at the user interface.

Live View Playback Config														
Properties	Privilege	Permission	F	^{>} riorit	у		Matri							
Device permission	•]		<i>€</i>	Ľ V	P		⁺L ▼	¢ כר	*ل ا	Ê) S	ر¶ت ∎ ∑	E,	S ⁴
	ding Server on_default narr	ne									Z	Z	Z	
	on_default nam													
	on_default nam g_default name			 ✓ 										

The settings featured on the **Privilege** tabbed page are:

Group	Setting	Description	Default
		Selects between All , None or Invert to select all devices, deselect all devices or reverse the selection.	All (All devices are selected.)
	All 🔹	This is a filter to show/hide some device(s) from the device list.	All
	S _{fil}	Accesses the device.	Selected (Enabled)
Device Permission	Ę	Views Live view, the instant playback of videos.	Selected (Enabled)
		Views Playback , the playback of recorded videos.	Selected (Enabled)
		Controls the optical PTZ and focus of cameras.	Selected (Enabled)
*L		Controls the "preset point", the pre-programmed point of view of a camera.	Selected (Enabled)

° ل	Starts/stops the camera's "patrol", which means a preset path that the camera goes through has scheduled.	Selected (Enabled)
۰۲	Sets the camera preset point and patrol	Selected (Enabled)
Ē	 Switches between stream profiles. A "stream profile" is a series of stream settings for mobile clients to stream videos with lower fps. Without such profile, users can neither watch live video on mobile client nor select lower fps stream on the Liveview screen. The stream setting can also fix the resolution and frame rate for a camera brand/series. 	Selected (Enabled)
dr.	Manually starts video recording.	Selected (Enabled)
	Exports video and metadata transactions.	Selected (Enabled)
۲	Backs up video transactions.	Selected (Enabled)
5 43	Triggers digital output.	Selected (Enabled)
	 Select a device (or a server) to enable the role to access it. Deselect a device (or a server) to disable the role from accessing it. 	Selected (Enabled)

10.2.2.5.4. Priority

It relies on the **Priority** tabbed page to set a **role**'s priority to control the PTZ (PAN-Tilt-Zoom), the preset point(s) and the patrol of a device. The **role** with higher priority has the right to precede others in controlling the said features of a device. Such **role** can even lock/unlock the rights of lower-priority **roles**.

The higher-priority role also takes the precedence in login to the Matrix Server.

To access the **Priority** tabbed page of a **role**:

 Open the **Properties** tabbed page of the **role** to configure as described in <u>Configure A Role</u>.

The **Properties** tabbed page opens in the **Configuration Pane**.

The **Properties** tabbed page opens in the **Configuration Pane**.

€ •	* *			Live View	Playback	Config	
	 ☑ User Group ☑ 4. Role … 4. Role - Admin … 4. Role - Power User 	Properties	Privilege Per	mission F	Priority	Matrix	
×	🧸 Role - User 🧸 Role - Guest	Name:					
	Role 1 ₩ & Role 2	Description:	Role 2 Description				
	🖽 Always 🌠 None						

2. From the Configuration Pane, click the tab Priority.

The **Priority** tabbed page then opens and shows some settings and all the networked devices.

The **Priority** tabbed page opens in the **Configuration Pane**.



The featured settings on the **Priority** tabbed page are:

Setting	Description	Default
PTZ/Preset/Patrol Priority	Sets the priority for a role to control the PTZ, preset points and patrol of a device.	7 (the highest priority)
Matrix Priority	 Sets the priority for a role to log in to a matrix. The Matrix Priority shows on the Ultimate level only. 	7 (the lowest priority)

Please note that only when have an "Ultimate level" license will you be able to see the Matrix setting.

10.2.2.5.5. Matrix

It relies on the **Matrix** tabbed page to enable/disable a **role** to/from accessing a Matrix Server.

To access the **Matrix** tabbed page of a **role**:

 Open the **Properties** tabbed page of the **role** to configure as described in <u>Configure A Role</u>.

The **Properties** tabbed page opens in the **Configuration Pane**.



The **Properties** tabbed page opens in the **Configuration Pane**.

2. From the **Configuration Pane**, click the tab **Matrix**.

The **Matrix** tabbed page then opens.

The Matrix tabbed page opens in the Configuration Pane.

€ م	* *			Live View Playback Config
	□ LUser Group □ LUser Group - Admin □ LUser Group - Power User □ LUser Group - Guest □ LUser Group 1 □ LUser Group 2 □ Role - Admin ■ Role - Ower User ■ Role - Guest ■ Role - User ■ Role 1 ■ Role 1 ■ Role 2 □ Schedule	Properties Matrix: View profile: Video wall:	Allow	Matrix Matrix 1 Matrix 2 e 3

The featured settings on the Matrix tabbed page are:

Group	Setting	Description	Default
Matrix		 Selects between All, None or Invert to select all Matrix Servers, deselect all Matrix Servers or reverse the selection. To select a Matrix Server is to enable users with the role to access it. To deselect a Matrix Server is to disable the role from accessing it. 	All (All Matrix Servers are selected.)
		 Enables/disables users with the role to/from accessing the Matrix Server. To select a Matrix Server is to enable users with the role to access it. To deselect a Matrix Server is to disable the role from accessing it. 	Selected (Enabled)
View profile		 Sets the view profile that applies when users with the roles logs in the matrix. See Matrix to know more about the view profile. 	
Video wall		Sets whether to allow users with the role to auto log in the matrix when the role logs in the NuClient .	Deselected (Not allowed)



Please note that only when have an "Ultimate level" license will you be able to see the Matrix setting.

10.2.3. Schedule

The "schedule" is a schedule profile that defines one or more periods of time to launch some actions from the Recording Server and Metadata Server, including the times to record videos, the times to stream data from the third-party device servers. The schedule also filters the times in which the occurrence of an event is taken effective.

By default, all **roles** are assigned the default **schedule profile**, which is **Always**, which means around-the-clock. The **Always** does not block any time period from the 24 hours of a day for the **Recording Server** and **Metadata Server** to take actions.

The **schedule profiles** make it highly flexible to manipulate the time for the **Recording Server** and **Metadata Server** to take actions. Users need not schedule the devices one by one but only have to apply the created **schedule profile(s)** to the devices. This can substantially reduce the time to schedule a large group of devices.

The schedule profiles are applied to the following settings:

- 1. Physical Config | Management Server | Recording Server | Video device | Camera | <u>Recording Schedule</u>
- 2. Physical Config | Management Server | Recording Server | Video device | Camera | <u>Event Action</u>
- 3. Physical Config | Management Server | Metadata Server | POS device | Channel | Properties | <u>Streaming schedule</u>
- 4. Physical Config | Management Server | Metadata Server | Access Control device | Channel | Properties | <u>Streaming schedule</u>
- 5. Physical Config | Management Server | Metadata Server | POS device | Channel | Event Action | <u>Add schedule</u>
- 6. Physical Config | Management Server | Metadata Server | Access Control device | Channel | Event Action | <u>Add schedule</u>
- 7. System Config | User group | User group | Properties | Login schedule

10.2.3.1. The User Interface

To understand the user interface of the **Schedule** group of settings:

 Access the System Config ("system configuration") as described in <u>System</u> <u>Config.</u>

The system configuration opens onscreen, and the **Tree Console** shows four topic settings: **User Group**, **Role**, **Schedule**, and **Layout**.



And the topic setting **Schedule** will expand four pre-configured **schedule profile**:

Always.



The **NuClient**'s pre-configured schedule profile.

The pre-configured **schedule profile is Always**, CANNOT be changed and deleted. However users are able to freely add their own **schedule profiles** to the software. The user-created **schedule profiles** are subject to change and deletion.

To add a **schedule profile**, see <u>Create A Schedule</u>. To edit a **schedule profile**, see <u>Configure A Schedule</u>. To delete a **schedule profile**, see <u>Delete A Schedule</u>.

10.2.3.2. Access Schedule Settings

To access the **Schedule** settings:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** then shows four setting groups: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **Schedule** if there shows a (+) plus sign.

All existing **schedule profile(s)** then collapse under the topic **Schedule**, including the software's pre-configured ones and the created ones.



10.2.3.3. Create A Schedule

To create a **Schedule**:

1. Run the **NuClient**. Click the **Config** tab from the **Top Toolbar**. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** then shows the four groups of settings – **User Group**, **Role**, **Schedule** and **Layout**.

2. Click the topic **Schedule**.

The topic Schedule becomes highlighted

3. From the bottom of the **Tree Console**, click the add icon +.



Click the add icon +.

A new schedule profile, named "schedule" by default, will be appended to the topic Schedule, and a Properties tabbed page will open in the Configuration Pane for users to configure the newly created schedule (profile).



To know the settings on the Properties tabbed page, see Properties.

10.2.3.4. Delete A Schedule

To delete a **schedule profile**:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **Schedule** if there shows a (+) plus sign.

All existing **schedule profile(s)** then collapse under the topic **Schedule**, including the software's pre-configured ones and the created ones.



All existing **schedule(s)** collapse under the topic **Schedule**.

3. Click the **schedule profile** to delete.

The schedule profile to delete becomes highlighted.

۲	**		Live View Playback Config
		Properties	
	··· 🖽 None	Name: specific days	
	···田 Daily ···田 Weeky ···田 monthly 1 ···田 monthly 2-1 ···田 monthly 2-2	Description: 2009/9/1 20	10/12/31 2011/5/10 2012/9/13
	🖽 yearly 1-1	Recursive mode: 🔵 Daily 🔵) Weekly 🔵 Monthly 🔵 Yearly 🥥 Specific day
	··· 🌐 yearly 1-2 ··· 🖽 yearly 2	Dates	
	specific days	2009/09/01	
	1		

Click the **schedule profile** to delete. Then it becomes highlighted.

4. From the bottom of the **Tree Console**, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.



- 5. Click **Yes** to confirm the deletion.
- 6. Click the **apply button** on the **Top Toolbar** to apply the change.

10.2.3.5. Configure A Schedule

To configure an existing schedule profile:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **Schedule** if there shows a (+) plus sign.

All existing **schedule profile(s)**then collapse under the topic **Schedule**, including the software's pre-configured ones and the created ones.



All existing schedule(s) collapse under the topic Schedule.

3. Click the **schedule profile** to configure.

The **Properties** tabbed page then opens at the **Configuration Pane**.

	Live View Playback Config
	Properties Name: specific days
Image: Constraint of the second se	Description: 2009/9/1 2010/12/31 2011/5/10 2012/9/13
w III yearly 1-1 w III yearly 1-2 w III yearly 2	tecursive mode: 🔷 Daily 🔷 Weekly 🔷 Monthly 🔷 Yearly 💿 Specific day
	2009/09/01 The Properties tabbed page opens at the Configuration

Click the **schedule** to configure.

To know the settings featured on the Properties tabbed page, see Properties.

10.2.3.5.1. Properties

It relies on the **Properties** tabbed page to configure a **schedule profile**.

To access the **Properties** tabbed page of a **schedule profile**:

1. Open the **Properties** tabbed page of the **schedule profile** to configure as described in <u>Configure A Schedule</u>.

The **Properties** tabbed page opens in the **Configuration Pane** for the **schedule profile** to configure.

•	**	드 문 X
	日 田 Schedule 一田 Always 一田 None 一田 Dally	Name: Echedule
		vrske mode: ● Daily _ Weekly _ Monthly _ Yearly _ Specific day oo oi oz oz oz o4 os os or oz oz oz o4 os os or oz oz oz zz handan handan handan Day Ø • Ø • ♥ ● Ø ۶

The Properties tabbed page opens at the Configuration Pane.

The settings featured on the **Properties** tabbed page are:

Setting	Description	Default
Name	Names the schedule profile.	"schedule"
Description	Provides a brief description for this schedule profile for the easier identification of it.	
Recursive mode	 Sets the configuration mode between Daily, Weekly, Monthly, Yearly and Specific day. Select Daily to set how often for an event or an action to take place on a daily basis. See "Daily" settings for details. Select Weekly to set how often for an event or an action to take place on a weekly basis. See "Weekly" settings for details. Select Monthly to set how often for an event or an action to take place on a monthly basis. See "Monthly" settings for details. Select Yearly to set how often for an event or an action to take place on a monthly basis. See "Monthly" settings for details. Select Yearly to set how often for an event or an action to take place on an annually basis. See "Yearly" settings for details. Select Specific day to set the day for an event or an action to take place. See "Specific day" settings for details. 	Daily

10.2.3.5.1.1. "Daily" settings

Use the **Daily** settings of a **schedule profile** to set how often for an event or an action to take place on a daily basis.

To access the **Daily** settings of a **schedule profile**:

 Open the Properties tabbed page of the schedule profile as described in Configure A Schedule.

The **Properties** tabbed page opens in the **Configuration Pane**.

• چ	**	_ 문 X
	日田 Schedule 一田 Always 一田 None 日 Daily	Name: Schedule
	Ell yearly 1-1 Rec Fill yearly 1-2 Fill yearly 2-3 Fill yearly 2 Fill yearly 2 Fill yearly 2 Fill yearly 2 Fill Layout Fill Grid Layout 1 Fill Grid Layout 2	ursive mode: Quily Weekly Monthly Yearly Specific day

The Properties tabbed page opens in the Configuration Pane.

2. At the Recursive mode setting, select Daily.

A daily time table shows onscreen, with a few graphic buttons.

At the Recu	rsive mode setting, select Daily.	A daily time table sho few graphic buttons.	ws onscreen, with a
Properties			
Name:	chedule		
Description:			
Recursive mode:	💽 Daily 🔵 Weekly 🔵 Monthly 🔵 Yearly 🔵 Specific d	ay	/
	00 01 02 03 04 05 06 07 08 handandandandandandandanda	09 10 11 12 13 14 15 16	17 18 19 20 21 22 23
	Day		
			/ - / - ← ⇒

The featured "daily" settings are:

Setting / Graphic Button	Description
daily time table 00 01 02 03 04 05 06 humhunhunhunhunhunhunhunhunhunhunhunhunhunh	 Click a time slot or drag through multiple time slots on the daily time table to select or deselect one or more time slot(s) in a day. Click button to be able to select a time slot. Click button to be able to deselect a time slot.
	 Click this button to be able to select a time slot. ▶ Click the down arrow icon ▼ to select all time slots of a day.
_/	 Click this button to be able to deselect a time slot. ▶ Click the down arrow icon ▼ to deselect all selected time slots.
9	Zooms out the daily time table to bring more time slots into view.
م	Zooms in the daily time table to make more specific selection of time slot(s).
+	Scrolls the daily time table to the left.
→	Scrolls the daily time table to the right.

10.2.3.5.1.2. "Weekly" settings

Use the **Weekly** settings of a **schedule profile** to set how often for an event or an action to take place on a weekly basis.

To access the Weekly settings of a schedule profile:

 Open the Properties tabbed page of the schedule profile as described in Configure A Schedule.

The **Properties** tabbed page opens in the **Configuration Pane**.

•	* *	Live View Playback Config
	I 문 User Group I 문, Role III Schedule III Schedule III Anays III None - RI Daily - 표 Weekly - 표 monthly 1-1 - 표 monthly 2-1	Name: schedule
		ursive mode: Daily Weekly Monthly Yearly Specific day 00 81 02 03 04 05 08 07 08 69 10 11 12 13 14 15 16 17 18 19 20 21 22 23 and

The **Properties** tabbed page opens in the **Configuration Pane**.

2. At the Recursive mode setting, select Weekly.

A weekly time table shows onscreen, with a few graphic buttons.



The featured "weekly" settings are:

Setting / Graphic Button	Description	
weekly time table	 Click a time slot or drag through multiple time slots on the weekly time table to select or deselect one or more time slot(s) in a week. Click button to be able to select a time slot. Click button to be able to deselect a time slot. 	
. ◆	 Click this button to be able to select a time slot. ▶ Click the down arrow icon ▼ to select all time slots of a week. 	
2/	 Click this button to be able to deselect a time slot. Click the down arrow icon ▼ to deselect all selected time slots. 	
R	Zooms out the weekly time table to bring more time slots into view.	
م	Zooms in the weekly time table to make more specific selection of time slot(s).	
+	Scrolls the weekly time table to the left.	
→	Scrolls the weekly time table to the right.	

Some settings show onscreen,

10.2.3.5.1.3. "Monthly" settings

Use the **Monthly** settings of a **schedule profile** to set how often for an event or an action to take place on a monthly basis.

To access the Monthly settings of a schedule profile:

 Open the Properties tabbed page of the schedule profile as described in Configure A Schedule.

The **Properties** tabbed page opens in the **Configuration Pane**.

• چ	<i>א</i> , א		Live View Playback Config
	I Clast Croup III Role IIII Schedule IIII Schedule IIII Atways IIII Atways IIII Atways IIII Atways IIII Atways IIII Atways IIII Atways IIII Atways IIII Atways IIIII Atways IIII Atways IIII Atways IIIIIII Atways IIII Atways IIIII Atways IIIII Atways IIIII Atways IIII Atways IIIII Atways IIII Atways IIIII Atways IIII Atways IIII Atways IIII Atways IIIII Atways I	Name: Description:	schedule
		cursive mode:	Daily Weekly Monthly Yearly Specific day 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 <u>analmahanhanhanhanhanhanhanhanhanhanhanhanhan</u>

The $\ensuremath{\textbf{Properties}}$ tabbed page opens in the $\ensuremath{\textbf{Configuration}}$ $\ensuremath{\textbf{Pane}}.$

2. At the Recursive mode setting, select Monthly.

Some settings show onscreen, with a **monthly time table** and a few graphic buttons.



The featured "monthly" settings are:

Setting / Graphic Button	Description
 Day 1 - of every month. The first - Sunday - of every month 	Sets which day of every month to configure, or which day of a week of every month to configure.
monthly time table 00 01 02 03 04 05 06 111111111111111111111111111111111111	 Click a time slot or drag through multiple time slots on the monthly time table to select or deselect one or more time slot(s) in a month. Click button to be able to select a time slot. Click button to be able to deselect a time slot.
۲	 Click this button to be able to select a time slot. ▶ Click the down arrow icon ▼ to select all time slots of a month.
_	 Click this button to be able to deselect a time slot. Click the down arrow icon ▼ to deselect all selected time slots.
R	Zooms out the monthly time table to bring more time slots into view.
م	Zooms in the monthly time table to make more specific selection of time slot(s).
+	Scrolls the monthly time table to the left.
▶	Scrolls the monthly time table to the right.

10.2.3.5.1.4. "Yearly" settings

Use the **Yearly** settings of a **schedule profile** to set how often for an event or an action to take place on an annual basis.

To access the Yearly settings of a schedule profile:

 Open the **Properties** tabbed page of the **schedule profile** as described in <u>Configure A Schedule</u>.

The **Properties** tabbed page opens in the **Configuration Pane**.

•	<i>א</i> , א	Live View Playback Config
	B Schedule 전 Aways - 팬 None - 팬 Daily - 팬 Weathy - 팬 monthly 2-1	Name: schedule
	El yearly 1-1 Rect Fail yearly 1-2 El yearly 1-2 El yearly 2-3 El yearly 2-3 El yearly 2-3 El yearly 2-3 El Layout El Crist Layout 1 El Crist Layout 2	rzke mode: • Daily Weekly Monthly Yearly Specific day 00 61 02 63 64 05 66 67 06 69 16 11 12 13 14 15 16 17 16 19 28 21 22 23 bardanaharaharaharaharaharaharaharaharaharah

The Properties tabbed page opens in the Configuration Pane.

2. At the Recursive mode setting, select Yearly.

Some settings show onscreen, with a **yearly time table** and a few graphic buttons. Some settings show onscreen, with an **annual time table** and a few graphic buttons.





The featured "yearly" settings are:

Setting / Graphic Button	Description
● Day 1 → of January → The first → Sunday → of January →	Sets which day of a month to configure, or which day of a week of a month to configure.
yearly time table 00 01 02 03 04 05 06 111111111111111111111111111111111111	 Click a time slot or drag through multiple time slots on the yearly time table to select or deselect one or more time slot(s) in a year. Click button to be able to select a time slot. Click button to be able to deselect a time slot.
	 Click this button to be able to select a time slot. ▶ Click the down arrow icon ▼ to select all time slots of a year.
_	 Click this button to be able to deselect a time slot. Click the down arrow icon ▼ to deselect all selected time slots.
م	Zooms out the yearly time table to bring more time slots into view.
م	Zooms in the yearly time table to make more specific selection of time slot(s).
+	Scrolls the yearly time table to the left.
→	Scrolls the yearly time table to the right.

10.2.3.5.1.5. "Specific day" settings

Use the **Specific day** settings of a **schedule profile** to set how often for an event or an action to take place on a specific day of all time.

To access the **Specific day** settings of a **schedule profile**:

 Open the Properties tabbed page of the schedule profile as described in <u>Configure A Schedule</u>.

The **Properties** tabbed page opens in the **Configuration Pane**.



The Properties tabbed page opens in the Configuration Pane.

2. At the Recursive mode setting, select Specific day.

A **perpetual calendar** shows onscreen, with a **specific day table** and some graphic buttons.

A perpetual calendar shows, with some graphic buttons.



A **specific day table** shows onscreen, with a few graphic buttons.

Group	Setting / Graphic Button	Description	
N/A	€ 	Selects a year.	
perpetual calendar	the perpetual calendar	 Click a date on this perpetual calendar to select or deselect a day. Click the button to be able to select a date. Click the button to be able to deselect a date. 	
		Click this button to be able to select a date on the perpetual calendar .	
	_	Click this button to be able to deselect a date on the perpetual calendar .	

The featured settings are:

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	the specific day table 00 01 02 03 04 05 06 000 01 02 03 04 05 06 000 01 02 03 04 05 06 00 01 02 03 04 05 06	 Click a time slot or drag through multiple time slots on this specific day table to select or deselect one or more time slot(s) of the date(s) selected on the perpetual calendar. Click the button to be able to select a time slot. Click the button to be able to deselect a time slot. 		
	•	Click this button to be able to select a time slot on the specific day table .		
specific day table		 Click the down arrow icon to select all time slots of the specific day. 		
		Click this button to be able to deselect a time slot on the specific day table .		
	=*	Click the down arrow icon ▼ to deselect all selected time slots on the specific day.		
	ج ر	Zooms out the specific day table to bring more time slots into view.		
	م	Zooms in the specific day table to make more specific selection of time slot(s).		
	+	Scrolls the specific day table to the left.		
	•	Scrolls the specific day table to the right.		

10.2.4. Layout

The **Layout** means to arrange the video grid that tiles together multiple video channels on a display.

10.2.4.1. The User Interface

To understand the user interface of the **Layout** group of settings:

 Access the System Config ("system configuration") as described in <u>System</u> <u>Config.</u>

The system configuration opens onscreen, and the **Tree Console** shows four topic settings: **User Group**, **Role**, **Schedule**, and **Layout**.



All the **layouts** are subject to change and deletion. See <u>Configure A Layout</u> to edit a **layout**. See <u>Delete A Layout</u> to delete a **layout**. See <u>Create A Layout</u> to add a **layout**.

2. From the **Tree Console**, click the topic **Layout**.

The **Overview** tabbed page then opens at the **Configuration Pane** to deliver a general view of all the existing **layouts**.



An overview of the user groups opens at the Configuration Pane.

10.2.4.2. Access Layout Settings

To access the **Layout** settings:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the topic **Layout**.

The **Overview** tabbed page then opens at the **Configuration Pane**.

The T	ree Console	
		The Overview opens at the Configuration Pane .
•	<i>*</i> *	Live View Playback Config
	User Group - Amin User Group - Power User User Group - Journ User Group - Journ User Group - Journ User Group 1 User Group 1 User Group 1 User Group 1 User Group 2 User Group 2 User Group 1 User Group 1 User Group 2 User Group 2 User Group 1 User Group 2 User Group 1 User Group 1 User Group 2 User Group 2 User Group 1 User Group 1 User Group 2 User Grou	Click the topic Layout.
	+ − ‡l	
Date: 2013	/04/21 Time: 20:49:53 Username: admin Server a	Idress: 000.000.000.000.5250 CPU loading: 14% Memory usage: Total 8092MB Free 3513MB Network: Download 102.61 kbps Upload 5.72 kbps

10.2.4.3. Create A Layout

To create a **layout**:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **F** from the Config Catalog.

The **Tree Console** then shows the four groups of settings – **User Group**, **Role**, **Schedule** and **Layout**.

2. Click the topic Layout.

The topic Layout becomes highlighted

The new layout is appended to the topic Layout.

3. From the bottom of the **Tree Console**, click the add icon +.

A new **layout**, named "layout" by default, will be appended to the topic **Layout**, and a **Properties** tabbed page will open in the **Configuration Pane** for users to configure the newly created **layout**.

	The Properties tabbed page opens in the Configuration Pane .					
<u>ن</u> ه به ا	_ 라 >	¢				
Image: Second	Provide Provide Pro					

To know the settings featured on the **Properties** tabbed page, see <u>Configure</u> <u>ALayout</u>.

10.2.4.4. Delete A Layout

To delete a **layout**:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **K** from the Config Catalog.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **Layout** if there shows a (+) plus sign.

All existing **layout(s)** then collapse under the topic **Layout**, including the software's pre-configured ones and the created ones

♦ ♦				Live View	Playback	Config
Image: Second Lagoot Image: Second Lagoot	ayout 1 .ayout 2 .ayout 3 .ayout 4	Properties Name: Description:	layout			

All existing layout(s) collapse under the topic Layout.

3. Click the **layout** to delete.

The **layout** to delete becomes highlighted.

	The layout to delete becomes highlighted.				
⊘ ~ <i></i>		Live View Playback Config			
Image: Stress of the stress	2 3 Description:	Grid Layout 4 Grid Layout 4 Description			

4. From the bottom of the Tree Console, click the delete icon —.

A question dialog opens to ask for the confirmation of deletion.



- 5. Click **Yes** to confirm the deletion.
- 6. Click the **apply button** on the **Top Toolbar** to apply the change.

10.2.4.5. Configure A Layout

To configure an existing **layout**:

1. Run the NuClient. Click the Config tab from the Top Toolbar. Then click the

System Config icon **the Config Catalog**.

The **Tree Console** shows four groups of settings: **User Group**, **Role**, **Schedule**, and **Layout**.

2. From the **Tree Console**, click the (+) plus sign besides the topic **Layout** if there shows a (+) plus sign.

All existing **layout(s)** then collapse under the topic **Layout**, including the software's pre-configured **layouts** and the created ones.

All existing layout(s) collapse under the topic Layout.

€	~ ~			Live View	Playback	Config
		Properties Name: Description:	layout]
3. Click the **layout** to configure.

The **Properties** tabbed page of the **layout** to configure then opens at the **Configuration Pane**.

		The Properties tabbed page opens in the Configuration Pane .
• چ	**	Live View Playback Config
	© III Schedule ■ ILayout 1 ■ Grid Layout 2 ■ Grid Layout 2 ■ Grid Layout 4 ■ Grid Layout 4 ■ Grid Layout 4	Properties Name: Tayout Description: Initial layout type: column 3 - xrow 3 - nitor aspect ratio: • 4.3 0 16.9

The featured settings on the **Properties** tabbed page are:

Setting	Description	Default
Name	Names the layout .	"layout"
Description	Provides a brief description for this layout for the easier identification of it.	
Initial layout type	 Sets the grid layout by assigning the amount of column(s) and the amount of row(s). 1 to 10 columns are configurable. 1 to 10 rows are configurable. 	3 columns & 3 rows
Monitor aspect ratio	Sets the aspect ratio of the display. Options available are 4:3 and 16:9. 	4:3
Merge	Merges the cells selected in the video grid.Click and drag a cell to select it.	
Unmerge	Restores the merged cells selected in the video grid.Click and drag a cell to select it.	

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11 Application Configuration

11.1 Image Fusion

The **Image Fusion Technology** allows a seamless panoramic view of multiple camera videos by changing their viewing angles and image sizes. Up to 10 independent cameras can be set up as single view.

To launch the Image Fusion Editor:



1. Access the Live View tab.

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2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.



3. Click the Image Fusion Editor.

The Image Fusion Editor launches.

Image Fusion Editor		×			
Image Fusion	parking				
··· 🐮 parking ··· 🛣 stainway	Image Fusion Description				
Image Fusion Image Fusion	Camera list:				
+-	+-				
	OK Cancel				

In the **Image Fusion Editor** window, the Config Catalog shows a list of the existing **image fusions**. The right side shows the configuration utility and the list of available cameras.

11.1.1. Create an Image Fusion

To create an **image fusion**:

1. Launch the Image Fusion as described in Image Fusion Editor.

The Image Fusion Editor launches, with the existing image fusion(s) listed in the Image Fusion tree at the Config Catalog and the configuration utility in the

Configuration Pane.

the image fusion tree in	
the Config Catalog	The configuration utility in the Configuration Pane
Image Fusion Editor	×
☐ Image Fusion	parking
… 着 parking … 着 stairway	Image Fusion Description
. 2월 jonas 2월 New Image Fusion 20 New Image Fusion(2)	Image: The set Image: The set
	Camera list Camera name
-	+- +-
	OK Cancel

2. In the Image Fusion tree, click the node Image fusion.

The Image fusion node becomes highlighted.

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3. Click the add sign icon + in the lower-right of the **Image fusion** box.



A new **image fusion** named "New Image Fusion" by default is appended to the **image fusion** tree.



A new **image fusion** named "New Image Fusion" by default is appended to the **image fusion** tree

4. Click on the name of the newly created **image fusion**.

On the Configuration Pane, change the name and enter a brief description about the panorama.

	×
parking	
Image Fusion Description	
	Angle: X Y Z IIIII Scale: Reset
Camera list	-
Camera name	
† I	+-
	OK Cancel

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5. Click the add sign icon 🕂 at the lower-right.

	×
parking	
Image Fusion Description	
	Angle: X Y Z I I I I Scale:
Camera list:	Reset
Camera name	
↑ ₽	+-
0	K Cancel

An Add Camera window opens.

Add Camera	×
NVR Recording Server\Immervision\default name NVR Recording Server\Counting\default name NVR Recording Server\Hall\default name NVR Recording Server\Reception\default name NVR Recording Server\Vito Supermarket\default name NVR Recording Server\Vito Supermarket\default name	
OK Cancel	

6. Select the cameras to add to the **image fusion**.

The selected cameras become highlighted.



The added camera images are stitched together in the view area at the upper part of the **Image Fusion Editor** window.



7. Adjust orientation of each image of the image fusion if you want to.

Use the horizontal and vertical sliders at the right side and bottom side of the view area to control the viewport of the **image fusion**. Use the XYZ sliders to adjust the angles of an image. Use the scale slider to enlarge or shrink an image.



8. Click the **OK** button and apply the change.

11.1.2 Delete An Image Fusion

- 1. Launch the Image Fusion as described in Image Fusion Editor.
- 2. In the **Image Fusion** group box, click the delete icon to delete an Image Fusion.

Image Fusion Editor		×
Image Fusion Image Fusion Statimage Statimage Statimage Fusion Statimage Fusion Statimage Fusion(2)	parking Image Fusion Description Scale: Camera list Camera name	
	∱ ↓	+-
T		
	ок	Cancel

3. Click the **OK** button and apply the change.

11.2 E-Map

E-map is a graphic image to be overlaid with the icons including Recording Server, video devices, cameras and I/O devices, Metadata Server, Metadata source, and Metadata a Channel, so administrators are able to know where a camera is located and also the layout of all the devices. Such graphic image can be a street map, a floor plan, or any other custom image file.

To launch the E-Map Editor:



1. Access the Live View tab.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.



- 3. Click E-Map Editor.
- 4. An E-Map Editor window opens.



The featured settings are:

Group box / Setting	Description	
Е-Мар	+	Adds an E-map.
group box	—	Deletes a selected E-map.
New Map field	Assigns the name for the E-map.	
Map Description field	Provides a brief description of the E-map.	
[Select a map image file] field	Click the ellipsis () button to open an explorer window to browser for the graphic image.1. The acceptable file formats are PNG, BMP, and JPEG.	

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2. The maximum file size allowed is 2MB.	
NVR Management Server group box	Expand the tree menu. Click and drag a desired camera or I/O device onto the graphic image and drop it where the device is installed on the image.

11.2.1. Create an E-Map

To create an E-map:

1. Launch the **E-map Editor** as described in <u>E-Map Editor</u>.

The **E-Map Editor** launches, with the existing E-maps listed in the **E-Map** group box at the upper-left, the **Management Server** tree menu in the lower-left, and the graphic image displays in the right.



2. In the **E-Map** group box, click the add sign icon + to add a new E-map to.

The root to be added with a new E-map then becomes highlighted.



The root to be added with a new E-map becomes highlighted.

3. Click the add sign icon + at the bottom-right corner of the E-Map group box.

A new E-map named "New Map" by default is appended to the root.

E-Map Editor			×
E-Map	New Map	[Select a map image file]	
···· 🕸 E-Map 1 ···· 🕸 New Map	Map Description		
⊣ ® 🛱 NVR Management Server			
			OK Cancel

4. Enter the name and a brief description for the new E-map. And click the ellipsis(...) button to open an explorer window to browser for the graphic image.



An image file is added. Scroll the mouse wheel to zoom in and out the map image.



5. From the **NVR Management Server** tree menu, drag a server on to the map.





The icons should all be placed on the area of an image and cannot be placed on the black area surrounding an image when you zoom out.

6. Drag a camera onto the map.



7. Drag an I/O device onto the map.



8. Adjust the size by dragging the edge points of an icon.



Drag and rotate the blue point to rotate an icon.



Click on the **x** icon to delete an icon.



To delete multiple icons at one time, select multiple icons and drag them to the trash can in the corner.



9. Click the **OK** button and apply the change.

11.2.2 Delete an E-Map

To delete an E-map:

- 1 Launch the **E-map Editor** as described in <u>E-Map Editor</u>.
- 2 In the **E-Map** group box, click the delete icon to delete an E-map.



3. Click the **OK** button and apply the change.

11.3 View

A view is the configuration of how you arrange video content in the view area, video stream settings, and the grid layout. Views can be categorized into Public View and Private View. Public Views are configured by the users who have the editing permission on the server and can be viewed by any users. Private views are visible only to who edit them, but every user can view private views.

The comparison between Public View and Private View:

Setting	Description
Public View	The users with edit privilege of the server. Everyone can view.
Private View	Everyone can edit privilege of the server. Visible only to view owners

To launch the View:

1. Access the Live View tab.



2. Click the View list



The featured settings are:

Setting	Description
+	Add view/group/view tour
-	Delete view/group/view tour
*	Configure view/group/view tour
2	Search
*	Switch stream profile
€	Send view/group/view tour to a secondary monitor when available



Live View can be displayed both in the primary monitor and in secondary monitors, but Playback can open only in the primary monitor.

11.3.1 Add A View

A view is the configuration of how you arrange video content in the view area, video stream settings, and the grid layout.

To launch the View:

1. Access the Live View tab.



2. Click the View list



3. Select the type of view, either Public or Private, to be created.





5. Click on Add View.



3. A new view named "New View" by default is appended to the root.





When you modify the content in View List, a modification icon will come with modified items. Any modification is not saved to remote servers until you upload it.

11.3.2 Add Cameras to View

To launch the View:



1. Access the Live View tab.

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2. Click the View list you want to edit.



3. Click Content list.

Drag and drop a single camera or a sensor to a grid cell.

OR

Drag and drop a server to a grid cell. Then the camera's video will show in the cell.

€ ~	Live View Playback Config
Content List	No Content Assigned
Physical Device Camera Genera Genera Generatura Generat	

4. Drag a server to the grid, cameras will fill up in the view area until no grid cells are available to display more video streams.





11.3.3 Delete a Camera from View

To launch the **View**:

1. Access the Live View tab.



2. Click the View list you want to edit.



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3. Click on the title bar of a channel and drag it to the trash can in the corner.



OR

Click on the trash can icon in the corner. Click **OK** to confirm the removal.



11.3.4 Add A View Group

A view group is a group of views which can be organized into a tree structure. You can manage views via view group.

To launch the View Group:

1. Access the Live View tab.



2. Click the View list



3. Select the type of view, either Public or Private, to be created.



4. Click on the add sign icon + to add View Group.



5. Click on add new view and new view will be added under selected group type.





OR

Drag the exist view to View Group.



11.3.5 Add A View Tour

A view tour is a set of different views which are automatically rotated to show in the view area.

To launch the View Tour:

1. Access the Live View tab.



2. Click the View list



3. Select the type of view, either Public or Private, to be added.





5. View Tour Setting opens.

View Tour Setting			×
View Tour na	me: New View Tour		
Dwell t	me: 10 🌐 S	Geconds	
 Public Views New Group 0714 Private Views New Group New Group New Group New Group 	» «		↑ ₹
	OK Cano	cel	

The featured settings are:

Setting	Description
View Tour Name	Edits View Tour Name.
Dwell Time	Edits the time interval when a view switches to the next one in a view tour.1 to 60 seconds are available.
»	Add view to View Tour .
«	Delete view to View Tour .
1	Moves the selected view up.
I	Moves the selected view down.

- 6. Click the **OK** button and apply the change.
- 7. In View Tour will switch between previous and next views, and toggle full screen.

No Content Assigned	No Content Assigned
No Content Assigned	No Content Assigned

The featured settings are:

Setting	Description
к л и и	Toggle full-screen
*	Go to previous view
ш	Pause
*	Go to next view

11.3.6 Duplicate A View

To duplicate a View:

1. Access the Live View tab.



2. Click the View list



3. Select the type of view, either Public or Private, to be duplicated.


4. Click on the add sign icon 🕂 and continue to click on Save As ...



5. Edits the name of the duplicated view and specify the destination view group.

	Save As	\times
	View name:	
	View group: 📫 Private Views 🗸	
	OK Cancel	
Save As	×	
View nam	e:	
View grou	p: 📫 Private Views 🕞 🕒	>
	Public Views	n

~1	1º	
=()=	
-1	13	
1	-	

You can duplicate for a view and a view tour.

11.3.7 Search A View

To search the View:

1. Access the Live View tab.



2. Click the View list



3. Select the type of view, either Public or Private, to be searched.



4. Click on the magnifier icon will show a text field.



5. Type the view would like to search. Clicking on the arrows to focus on the matched results.





11.3.8 Delete A View

To delete the **View**:

1. Access the Live View tab.



2. Click the View list



3. Select the type of view, either Public or Private, to be deleted.



4. Click the delete icon — to delete a **View**.





11.3.9 Assign stream profile

To assign profile for the **View**:

1. Access the Live View tab.



2. Click the View list



3. Select the type of view.





4. Click on 🔀 to choose a universal stream profile for it



5. Choose automatically adjust stream profile by the grid, or switch to specific stream profile once.



The featured settings are:

Setting	Description
Auto	Enables original profile for all cameras when select 1x1 grid display.
Original	Enables the original profile for all cameras.
Low	Enables the low profile on grid number of display between 4-15 channels.
Minimum	Enables the minimum profile when the grid number of display is over 16 channels.



If the stream profile chosen is not supported by specific cameras, the cameras will remain the original stream profile settings.

6. Also can adjust specific camera stream profile on grid.



11.4 Client Configuration

To "configure the client" is to configure the **NuClient**'s "preference" to control how the software acts each time the software is used. It also controls how the user interface is presented.

To launch the **Client Configuration**:



1. Access the **NuClient**.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.



3. Click the **Client Configuration**.

The **Client Configuration** launches and shows three menus in its Config Catalog: **General**, **User Interface**, and **Function**.

_	The Client Configuration show	s three menus in its Config Catalog: General, User
	Interface, and Function.	
Client Configuration		×
General User Interface Function	Client Startup Setting Start client when operating system starts Enable Auto Login Server IP address: Server port 5250 Username: Password: Confirm Password:	Monitor Display Select favorite layouts: Layouts Default stream profile: Auto Minimize Secondary Monitor(s) when Main Monitor is minimized. Time Zone Use clients time zone: Current clients time: 2013/08/19 14:37:23 Select a different time zone: UTC+08:00 Current selected time:
	Enable Full Screen	2013/08/19 14:37:23 Manually adjust clock for Daylight Saving Time by 0 🔒 hour(s)
		OK Cancel

To know the **General** menu, see <u>The General Menu</u>.

To know the **User Interface** menu, see <u>The User Interface Menu</u>.

To know the **Function** menu, see <u>The Function Menu</u>.

11.4.1. The General Menu

It relies on the **General** menu of to configure how the **NuClient** acts each time it is used.

To open the **General** menu:

1. Access the **NuClient**.



2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

i 🖉 🗸
Update to server
Log Export
Backup Tool
E-Map Editor
Image Fusion Editor
Client Configuration
Import / Export Configuration 🕨
About
Logout
Exit



The Client Configuration launches and shows the General menu by default.

The General menu features three group boxes: Client Startup Setting, Monitor Display, and Time Zone.

Group Box	Setting	De	Description					
	Start client when operating system starts		Tick the check box to enable the NuClient to auto-launch when the operating system starts up.					
			Tick the check box to enable the NuClient to auto-connect to the specified server when the NuClient is launched. 1. When enabled, the following settings are available:					
			Setting	Description	Default			
Client Startup Setting	Enable Auto Login		Server IP address	Sets the IP address of the server to connect to.				
			Server port	Server port Sets the port number of the server IP address to connect to.				
			Username	Sets the username to login to the server.				
			Password	Sets the password to login to the server.				
			Confirm Password	Re-enters the password to login to the server.				
	Enable Full Screen	Tick the check box to enable the NuClient to be opened in full screen.						
Monitor Display	Select favorite layouts	4	Opens a Select Favorite Layout window for users to select up to 4 different grid layouts as their favorites. These favorite layouts will be accessible from the toolbar of the software's Live View and					

They present the following settings:

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		Playback.				
			Select Favorite Layout × \checkmark			
		Four op	 Sets the default stream profile. Four options are available: Auto, Original, Low and Minimum. 			
		Setting	Description			
	Default Stream Profile	Auto	Enables original profile for all cameras when select 1x1 grid display.			
		Original	Enables the original profile for all cameras.			
		Low	Enables the low profile on grid number of display			
			between 4-15 channels.			
		Minimum				
		Tick the chec main monitor 1. The NuC 2. Live Vie	between 4-15 channels. Enables the minimum profile when the grid number			
	Use client's time zone	Tick the chec main monitor 1. The NuC 2. Live Vie Playbac	between 4-15 channels. Enables the minimum profile when the grid number of display is over 16 channels. k box to minimize the secondary monitor(s) when the is minimized. Client can connect up to 4 monitors. w can only be opened in any of the 4 monitors, and			
Time Zone		Tick the chec main monitor 1. The NuC 2. Live Vie Playbac Applies the N	between 4-15 channels. Enables the minimum profile when the grid number of display is over 16 channels. k box to minimize the secondary monitor(s) when the is minimized. Client can connect up to 4 monitors. w can only be opened in any of the 4 monitors, and k can only run on the first monitor only.			

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If the stream profile chosen is not supported by specific cameras, the cameras will choose "Original" profile when added to View.

11.4.2 The User Interface Menu

It relies on the **User Interface** menu to control which information to show on the software's status bar / content title and which dockable components to show in the software's user interface.

To open the User Interface menu:



1. Access the **NuClient**.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.



3. The **Client Configuration** launches and shows the **General** menu by default.

Client Configuration		×
General User Interface Function	Client Startup Setting Start client when operating system starts Enable Auto Login Server IP address: Server port 5250 Username: Password: Confirm Password:	Monitor Display Select favorite layouts: Default stream profile: Minimize Secondary Monitor(s) when Main Monitor is minimized. Time Zone Use client's time zone: Current client's time: 2013/08/19 14:37:23 Select a different time zone: UTC+08.00 Current selected time: 2013/08/19 14:37:23
	Enable Full Screen	Manually adjust clock for Daylight Saving Time by 0 B hour(s)

4. From the Config Catalog, click the User Interface.

Ctient Configuration × Ceneral Customize Function Function Content Title © Show content title © Grid number © Gamera name © Device name © Device name © Camera bit rate © Camera frame rate © Displayed streaming bit rate © Camera recording status K Cancel

The User Interface menu opens and shows the General tabbed page.

To know the **General tabbed** page, see <u>The General tabbed page</u>. To know the **Customize** tabbed page, see <u>The Customize tabbed page</u>.

11.4.2.1 The General tabbed page

It relies on the **General** tabbed page to enable/disable a piece of information on the **Status Bar** of **NuClient**, which locates at the bottom of the software. It also relies on the **General** tabbed page to enable/disable a piece of information on the title bar of a video channel in the **View Area**.



The Status Bar

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Follow the guide below to enable/disable a piece of information on the software's **Status Bar** or a piece of information on the title bar of a video channel in the **View Area**.



1. Access the **NuClient**.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🔹.



3. The **Client Configuration** launches and shows the **General** menu by default.

Client Configuration		×
General User Interface Function	Client Startup Setting Start client when operating system starts Enable Auto Login Server IP address: Server port: 5250 Username: Password: Confirm Password:	Monitor Display Select favorite layouts: Layouts Default stream profile: Auto ♥ Minimize Secondary Monitor(s) when Main Monitor is minimized. Time Zone ● Use client's time zone: Current client's time: 2013/08/19 14:37:23 ● Select a different time zone: UTC+08:00 Current selected time: 2013/08/19 14:37:23
	Enable Full Screen	Manually adjust clock for Daylight Saving Time by 0 🛱 hour(s)

4. From the Config Catalog, click the **User Interface**.

The User Interface menu opens and shows the General tabbed page.

Client Configuration	×
General User Interface	Ceneral Customize
Function Content Title	Status Bar
Show content title	Date
🛃 Grid number	Time
Server name	Username of the login server
Device name	Address of Management server
🔽 Camera name	CPU utilization of client PC
Camera bit rate	Memory usage of client PC
Camera frame rate	Displayed streaming bit rate
Date	Customized text
Time	
Camera recording status	
	OK Cancel

5. In the **Content Title** group box, select/deselect an item to enable/disable that piece of information on the title bar of a video channel in the **View Area**.

6. In the **Status Bar** group box, select/deselect an item to enable/disable that piece of information on the software's **Status Bar**.

(The **Customized text** setting enables a piece of custom information to show in the **Status Bar**. Maximum 64 Unicode characters are allowed.)

Chent Conliguration					^
General User Interface	(General C	Customize		
Function	Content Title	s	Status Bar		
	Show content title		Date		
	Grid number		Time		
	Server name		Username of the login server		
	Device name		Address of Management server		
	Camera name		CPU utilization of client PC		
	Camera bit rate		Memory usage of client PC		
	Camera frame rate		Network download bit rate		
	Date		Network upload bit rate		
	Time		Customized text		
	Camera recording status				
					0
				ОК	Cancel

11.4.2.2 The Customize tabbed page

It relies on the **Customize** tabbed page to configure which dockable widget to show at the Config Catalog of each **Live View** and **Playback** of the software.

Follow the guide below to enable/disable a widget at the Config Catalog of each Live View and Playback:



1. Access the NuClient.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.



Client Configuration		×			
General User Interface Function	Client Startup Setting Start client when operating system starts Enable Auto Login Server IP address: Server port 5250 Username: Password: Confirm Password:	Monitor Display Select favorite layouts: Layouts Default stream profile: Auto Minimize Secondary Monitor(s) when Main Monitor is minimized. Time Zone Use clients time zone: Current client's time: 2013/08/19 14:37:23 Select a different time zone: UTC+08:00 Current selected time:			
	Enable Full Screen	Manually adjust clock for Daylight Saving Time by 0 🔒 hour(s)			

3. The **Client Configuration** launches and shows the **General** menu by default.

4. From the Config Catalog, click the User Interface.

The User Interface menu opens and shows the General tabbed page.

Client Configuration					×
General User Interface		General Cu	stomize		
Function	Content Title	Sta	tus Bar		
	Show content title		Date		
	Grid number		Time		
	Server name		Username of the login server		
	Device name		Address of Management server		
	Camera name		CPU utilization of client PC		
	Camera bit rate		Memory usage of client PC		
	Camera frame rate		Displayed streaming bit rate		
	Date		Customized text		
	Time				
	Camera recording status				
				ОК	Cancel

5. Click the **Customize** tab.

Client Configuration			×
General		General Customize	
User Interface Function	LiveView Workspace Content List	Playback Workspace	٦
	Event List	 Event List 	
	VO VO	PTZ Panel	
	Matrix	✓ Properties	
	Matrix Profile List	Search	
	PTZ Panel	Time Span	
	✓ Properties ✓ View List	✓ View List	
		OK Cancel	

- 6. In the **Live View Workspace** group box, select/deselect an item to enable/disable that widget at the Config Catalog of the **Live View** screen.
- 7. In the **Playback Workspace** group box, select/deselect an item to enable/disable that widget at the Config Catalog of the **Playback** screen.
- 8. For example, select only **Content List, Event List, and View List** in the Live View Workspace group box.



The **Live View** screen then shows only the widgets of the Content List, Event List, and View List.



Right-click on the title bar of a dockable widget to open a context menu to enable/disable a widget at the Config Catalog of the **Live View** or **Playback** screen.



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11.4.3 The Function Menu

It relies on the **Function** menu to configure the features of each the **Live View** and **Playback** screen.

To open the **Function** menu:



1. Access the **NuClient**.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.



Client Configuration		X			
General User Interface Function	Client Startup Setting Start client when operating system starts Enable Auto Login Server IP address: Server port 5250 Username: Password: Confirm Password:	Monitor Display Select favorite layouts: Layouts Default stream profile: Auto Minimize Secondary Monitor(s) when Main Monitor is minimized. Time Zone Use client's time zone: Current client's time: 2013/08/19 14:37:23 Select a different time zone: UTC+08:00 Current selected time: 2013/08/19 14:37:23			
	Enable Full Screen	Manually adjust clock for Daylight Saving Time by 0 🗄 hour(s)			

3. The Client Configuration launches and shows the General menu by default.

4. From the Config Catalog, click the **Function**.

The Function menu opens and shows the Live View tabbed page by default.

Client Configuration				×
General User Interface			Live View	Playback
Function	Snapshot			Audio
	Manual print or s:	ave Snapshot image		
	Automatically sav	e Snapshot images		Enable audio on selected channel
	Save image location:			
	Save as type:	.bmp -		Instant Playback
				Start playing from previous N seconds (15~300) 80
	Alarm Enable Audio Not Audio file: Default User defin	ification ned audio file:		Event List Event List display options: Max. events under Event List 100 Show events under 10 minute(s) Video display mode: Popup window First empty grid or Grid 1 if no empty grid
				Joystick v Settings
				OK Cancel

To know the **Live View** tabbed page, see <u>Live View tabbed page</u>. To know the **Playback** tabbed page, see <u>Playback tabbed page</u>.

11.4.3.1 Live View tabbed page

It relies on the **Live View** tabbed page to enable/disable a feature of the **Live View** screen.

To open the **Live View** tabbed page:

1. Access the NuClient.



2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🔹.

i i i i i i i i i i i i i i i i i i i
Update to server
Log Export
Backup Tool
E-Map Editor
Image Fusion Editor
Client Configuration
Import / Export Configuration 🕨
About
Logout
Exit

3. The **Client Configuration** launches and shows the **General** menu by default.

Client Configuration		×
General User Interface Function	Client Startup Setting Start client when operating system starts Chart client when operating system starts Carter IP address: Server port: 5250 Username: Password: Confirm Password: Enable Full Screen	Monitor Display Select favorite layouts: Layouts Default stream profile: Auto Minimize Secondary Monitor(s) when Main Monitor is minimized. Time Zone Use client's time zone: Current client's time: 2013/08/19 14:37:23 Select a different time zone: UTC+08:00 Current selected time: 2013/08/19 14:37:23 Manually adjust clock for Daylight Saving Time by Definition hour(s)
		OK

4. From the Config Catalog, click the **Function**.

The **Function** menu opens and shows the **Live View** tabbed page by default.

Client Configuration				×
General User Interface Function	Snapshot		Live View	Playback Audio
	 Automatically sav 	ave Snapshot image e Snapshot images (C:\Users\jcc\Desktop		Enable audio on selected channel
	Save as type:			Instant Playback Start playing from previous N seconds (15~300).60
	Alarm Enable Audio Not Audio file: Default User defin	ification ned audio file:		Event List Event List display options: Max. events under Event List. 100 Show events under 10 minute(s) Video display mode: Popup window First empty grid or Grid 1 if no empty grid Joystick Settings
				OK Cancel

The featured settings are:

Group Box	Setting	D	escription						
	Manual print or save Snapshot image		Tick the check box to assign the folder to save a snapshot to each time a snapshot is captured.						
		Tick the check box to save the snapshot to a specific folder by a specific format.							
		When enabled, the following settings are available: Setting Description Default							
Snapshot	Automatically save Snapshot image		Setting Save image location		 Sets where to save the captured snapshot. Click the ellipsis () button to open an explorer window to browser where to save the snapshot. 		Tr de		
			Save as t	ype:	the snap ▶ Tw av		.bi	.bmp	
		Save with Content ⊺		ith t Title snapsh title" of which is		the captured not with the "content the video channel (, is delivered by the title the video channel.)		Selected (enabled)	
			Save with Digital Zoom Open the file after save		Saves the captured snapshot with the "Digital Zoom" of the video channel		Selected (enabled)		
					Auto-opens the snapshot after it is saved.			eselected isabled)	
		Enables/disables the NuClient to sound an audio for notification when an event comes up. 1. Enabled is the default. 2. When enabled, the following group of settings becomes available:					ole:		
			Group	Sett	ing	Description		Default	.
Alarm	Enable Audio Notification			Defa		Uses the system-featured sound file for the alarm audio.		Selected (Enabled)	
					r-defined o file:	Uses a unique sound file of user's own for the alarm audio. 1. Click the ellipsis () button to open an explore window to browser for the audio file.	5		
Audio	Enable audio on selected channel	audio file. Sets whether to hear the sound of the instant video when the camera channel is clicked. 1. This setting requires the camera to have a microphone. 2. Enables the mouse over any video channel in the View Area to launch a tool bar to enable/disable the camera audio.						to	

Instant	Start playing							
Playback Event List	from previous N seconds (15~300):	 15 to 300 60 second 	ast to forward or rewind an instant v seconds configurable. Ids is the default.	-				
	Event List display options		w to display an event in the Event I ents to show or how long to display as are:					
	options		Description	Default				
		Max. events under Event	 Defines how many events to show in the Event List. 1 to 1000 events configurable. 2. 100 events is the default. 	Selected (Enabled)				
		events under	 Defines the maximum time to show an event in the Event List. 10 to 60 minutes configurable. 2. 10 minutes is the default. 	Deselected (Disabled)				
	Video display mode		play mode. des are available: Popup window (I if no empty grid.	or First empty grid				
Joystick	N/A	Sets joystick fe	eature.					
		Setting	Description					
		Name	Joystick button name.					
		Sets joystick function.FunctionFunctionPTZ control.						

		Se	etting	Description	
		gr	ew and id vitching	Go to monitor # Next view Previous view Next grid Previous grid Go to grid #	
		la	creen yout vitching	Toggle single came Toggle full-screen	era view
		P1 co	TZ ontrol	Digital / Optical swi Zoom in Zoom out Go to preset #	itch
Pa	arameter	Joy	stick's par	rameter.	
Jovs	stick Settings				×
	Name Button 1		Switch Vi	Function iew/ Switch Grid	Parameter
1					
2	Button 2		_		
3	Button 3		_	iew/Switch Grid 👻	
4	Button 4		_	iew/ Switch Grid 🔫	
5	Button 5		_	iew/ Switch Grid 🔫	
6	Button 6		-	iew/ Switch Grid 👻	
7	Button 7		_	iew/ Switch Grid 🔻	
8	Button 8		-	iew/ Switch Grid 👻	
9	Button 9		<u> </u>	iew/ Switch Grid 👻	
10			_	iew/ Switch Grid 🔫	
11			_	iew/ Switch Grid 👻	
12	2 Button 12		Switch Vi	iew/Switch Grid 👻	
			ОК	Cancel	



Enable joystick option when use joystick plugged to computer.

11.4.3.2 Playback tabbed page

It relies on the **Playback** tabbed page to enable/disable a feature to/from the **Playback** screen.

To open the **Playback** tabbed page:

1. Access the **NuClient**.



2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🔹.

@ ~
Update to server
Log Export
Backup Tool
E-Map Editor
Image Fusion Editor
Client Configuration
Import / Export Configuration 🕨
About
Logout
Exit

3. The **Client Configuration** launches and shows the **General** menu by default.

Client Configuration		X
General User Interface Function	Client Startup Setting Start Client when operating system starts Enable Auto Login Server IP address: Server port: 5250 Username: Password: Confirm Password:	Monitor Display Select favorite layouts: Layouts Default stream profile: Auto Minimize Secondary Monitor(s) when Main Monitor is minimized. Time Zone Use client's time zone: Current client's time: 2013/08/19 14:37:23 Select a different time zone: UTC+08:00 Current selected time: 2013/08/19 14:37:23 Manually adjust clock for Daylight Saving Time by 0 the hour(s)
		OK

4. From the Config Catalog, click the **Function**.

The **Function** menu opens and shows the **Live View** tabbed page by default.

Client Configuration				×		
General User Interface Function	 Automatically sav 	e Snapshot image e Snapshot images C:USerstyccDesktop .bmp Save with Content Title Save with Digital Zoom Open file after save	Live View	Image: Start playing from previous N seconds (15~300); 60 5		
	Alarm Enable Audio Notification Audio file: Default User defined audio file:			Event List Event List display options: Max. events under Event List 100 Show events under 10 minute(s) Video display mode: Popup window First empty grid or Grid 1 if no empty grid Joystick Settings		
				OK Cancel		

5. Click the **Playback** tab.

The **Playback** tabbed page opens.

Client Configuration			×		
General User Interface	Live View Playback				
Function	Snapshot		Audio		
	Manual print or save Snapshot image				
	Automatically save Snapshot images		Enable audio on selected channel		
	Save image location: C:\Users\jcc\Desktop				
	Save as type: .bmp		Playback Skip Interval		
			Skip Forward interval: 60 second(s)		
			Skip Backward interval: 60 second(s)		
			Ship Backward Interval.		
			OK Cancel		

The featured settings are:

Group Box	Setting	Description			
	Manual print or save Snapshot image	Tick the check box to assign the folder to save a snapsho each time a snapshot is captured.			a snapshot to
		sp	Tick the check box to save the snapshot to a specific folder by a specific format. 1. When enabled, the following settings are available:		
			Setting	Description	Default
Snapshot	Automatically save Snapshot image		Save image location	Sets where to save the captured snapshot. 1. Click the ellipsis () button to open an explorer window to browser where to save the snapshot.	The desktop folder
			Save as type:	Sets the file format to save the snapshot to.	.bmp
			Save with Content Title	Saves the captured snapshot with the "content title" of the video channel (, which is delivered by the title bar of the video channel.)	Selected (enabled)
			Save with Digital Zoom	Saves the captured snapshot with the "Digital Zoom" of the video channel	Selected (enabled)

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		Open the file after saveAuto-opens the snapshot after it is saved.Deselected (disabled)		
Audio	Enable audio on selected channel	Sets whether to hear the sound of the recorded video when the camera channel is clicked.1. This setting requires the camera to have a microphone and the audio input must be enabled during recording.		
Playback Skip	Skip Forward Interval	Defines how fast to forward a recorded video1. 1 to 3600 seconds configurable.2. 60 seconds is the default.		
Interval	Skip Backward Interval	Defines how fast to rewind a recorded video1. 1 to 3600 seconds configurable.2. 60 seconds is the default.		
12.Live View

Live view page displays video streams in a grid. Grid types can be configured using the toolbar below the live view area.



Status Bar

If you have multiple monitors, the Live View interface on secondary monitors is very similar. The main difference is in the toolbar.

The interface of Live View on a secondary monitor



The featured settings are:

Graphic Button	Description
	Switch between views
×	Close Live View on a secondary monitor

12.1 View List

A view is a collection of configurations including those of grid layouts, camera settings, aspect ratios, stream profiles, etc.

12.2 Content List

Content List shows all the devices a user have permission to access. A device can be a camera, an I/O device, an image fusion, or an E-map.

Each device node as shown in the screenshot below can be expanded to see the details of each device. Expanding each device will show subordinate items, such as sensors on cameras.

12.2.1 Watch Live Video

In view area, add devices from Content List to the view area. You may add not only cameras, but also image fusion, E-Map, and I/O devices to the view area. Refer to the <u>View</u> section to add view, camera, view tour, etc.

12.2.2 Toolbar Content

For each camera channel has toolbar for quick operation. You can use the toolbar easily.



The featured settings are:

Setting	Graphic Button	Description
Instant Playback		 Sync to playback. Current instant playback will be opened in playback tab. However, if instant playback runs in a secondary monitor, then the playback will be opened on the primary monitor. See also the Instant Playback of toolbar content
Snapshot	Ci	Takes snapshot.See also the <u>Snapshot</u> of toolbar content.
PTZ	櫰	 Controls camera remote directional and zoom. See also the <u>PTZ</u> of toolbar content.
Manual Record Video		 Records video manually. See also the <u>Manual Record Video</u> of toolbar content.
Audio	4 0	 Enables/disables audio. See also the <u>Audio</u> of toolbar content.
Connection	8	Connects/disconnects camera. See also the <u>Connection</u> of toolbar content.

12.2.2.1 Instant Playback

Click on the Instant Playback icon. You may playback video or



reverse-playback video with this function. Hold the scroll handle in the middle can change the playback speed.



12.2.2.2 Snapshot

12.2.2.1 Snapshot one channel





icon in toolbar content and saves the snapshot of the

current video channel at the current moment.

You may choose to export title names, enable digital zoom in exported data, save exported images to files or to printers.



The featured settings are:

Setting	Description				
Snapshot Parameters		re are two options tal Zoom.	as available: save with Content title and save with		
		There are two op	ptions available: print and save Snaps	hot as image	
		Setting	Description	Default	
		Save image location	Selects the image save location.		
Print / Save Options		Image file name	Edits the image file name.		
		Save as type	 Selects the image save type. There are two options available: .bmp and. jpeg. 	.jpeg	
	2.	Enables/disable	open file after save.		

Snapshot is available only with cameras, not with E-map and I/O.

If "Open File after save" is checked, the snapshot will open after the snapshot is saved on disk.

If a channel contains an E-map, then the status of the E-map will be snapshotted. If it contains I/O, then the I/O status will be snapshotted.

Snapshot	×
Snapshot Parameters Save with Content Title Save with Digital Zoom Pr Se 3ce	Print / Save Options Print Save Snapshot as image file Save image location: C:\Users\yclin\Desktop
	Image file name: Save as type: .bmp • Open file after save
	Snapshot Parameters Save with Content Title Save with Digital Zoom V1 Se Xe

12.2.2.2 Snapshot whole view area

If you want to snapshot all channels on the screen, you need to press the snapshot icon in view toolbar.



If the content of a channel is E-map or I/O panel, they will also be put in a snapshot.



The featured settings are:

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Setting	Des	cription		
Snapshot Parameters	Thei Digit	I save with		
3. Print / Save Options		There are two op file.	ptions available: print and save Snaps	hot as image
		Setting	Description	Default
		Save image location	Selects the image save location.	
		lmage file name	Edits the image file name.	
		Save as type	 Selects the image save type. There are two options available: .bmp and. jpeg. 	.jpeg
	4.	Enables/disable	open file after save.	

If "Open File after save" is checked, the snapshot will open after the snapshot is sav	h cameras, not with E-map and I/O.
on disk.	cked, the snapshot will open after the snapshot is saved
If a channel contains an E-map, then the status of the E-map will be snapshotted it contains I/O, then the I/O status will be snapshotted.	

12.2.2.3 PTZ

Please see the section of <u>PTZ</u> for details.

12.2.2.4 Manually Record Video

1. Click on the Start/Stop Recording icon.



2. When video is being recorded, the icon will become a square **L**. Click it again to

stop recording.



12.2.2.5 Audio

Presses the speaker icons



to enable / disable audio from a camera.

Please note that a camera must support audio for this function to work.

	If your camera supports audio but you cannot hear that in NuClient, please make sure:1. Audio is enabled in the admin interface of the camera.2. Cables are properly connected.				
	3. Audio is not muted in Windows.				
	If multiple channels of video streams are running without enough bandwidth, it is possible to hear audio of poor quality. To solve this issue, you may try disconnecting a few cameras.				
Q	After switching to different layouts, if a camera is not present in the current grid, you will not able to hear the audio of it.				

12.2.2.6 Connection

Press the chain icon to connect to a camera and disconnect from a camera.



12.3 PTZ Panel

In the panel, you may control both optical and digital pan/tilt/zoom of your cameras. Optical PTZ is enabled only when a camera has PTZ capability. Digital PTZ is achieved purely by digital image processing, and it is enabled for all cameras.

12.3.1 PTZ

PTZ is a mechanism for remote directional and zoom control. PTZ is an abbreviation of Pan, Tilt, and Zoom. Pan refers to horizontal movement of a camera; Tilt refers to

vertical movement of a camera; Zoom refers to the change in focal lengths.

12.3.1.1 Optical PTZ



The featured settings are:

Setting	Graphic Button	Description
PTZ		Controls the camera view by using the PTZ camera control panel to adjust the camera's view.
Zoom in		Zooms in of the area of interest.
Zoom out		Zooms out of the area of interest.
Focus near		Focuses near of the area of interest.
Focus far		Focus far of the area of interest.
Auto focus	AF	Adjusts the focus point of the area of interest.

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	Sets camera PTZ	-			
		e configured to the preset configurations when select a preset point.			
		oints are availab			
	Setting	Descrip	tion		
PTZ Preset(s)	Select one prese	Selects	the preset point .		
	+ل				
		Delete	preset point.		
	*	Sets pr	reset point.		
	for the assigned ti	me period.	user go to preset point automatically and stay at the preset point		
		groups are avail			
	Setting	pints for a patrol group are available. Description			
	Patrol (0)	Selects Patrol.			
	►	Starts Patrol.			
			Stops Patrol.		
		Sets Patrol.			
Patrol		Patrol Editor Patrols Patrol (b) Patrol (1) Patrol (2) Patrol (3)	Name: Patrol (0) Start patrol after PTZ tide. Duration (10 - 600 sec): 30 Camera Preset Point HOME PRESET01 PRESET02 PRESET02 PRESET03 PRESET04 Comera Preset Point PRESET04 Comera PresetPoint PRESET04 PRESET04		
	*	Setting	Description		
		Name	Edits Patrol Name.		
		Start patrol after PTZ idle	Restores patrol automatically when utilize PTZ and temporarily take over patrol process.1 to 60 seconds are available.		
		>>	Add preset point to Patrol .		
			Delete preset point to Patrol .		

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Duration	Sets the duration between two preset points.1 to 99 seconds are available.
1	Moves the selected preset point up.
Ŧ	Moves the selected preset point down.

Q	Optical PTZ is the default PTZ mode as long as a camera supports it.
	The names of preset may be scrambled if input Chinese/Japanese/Korean characters due to cameras do not support those character sets.
Q	Please assign preset point setting first before Patrol.
Q	For patrol, the preset point can be chose for multiple times.
Q	If user operate camera PTZ or go to preset point during patrol process, patrol will stop without manually stop patrol. If user enabled "Start patrol after PTZ idle" for this patrol, the patrol process will restore after assigned PTZ idle duration.

12.3.1.2 Digital PTZ

In contrast to optical PTZ, Digital PTZ is an image-processing algorithm used to magnify each pixel see in a video image. Since it is merely a software algorithm, digital PTZ is supported with any camera which NuClient connects to. Digital PTZ is supported both in Live View and Playback.

Optical PTZ is supported only in Live View, while digital PTZ is supported both in Live View and Playback.

There are three ways of using digital PTZ in NuClient: <u>draw a rectangle</u>, <u>use mouse</u> <u>wheel</u> and <u>use the on-screen buttons</u>.

12.3.1.2.1 Draw a rectangle

Draw a rectangle area in view area. The covered area which is surrounded dashed lines will be magnified and stretched to the whole view area. As soon as the rectangle is drawn, the view is smoothly zoomed into the area of interest.





In the corner, find a sub-window showing the full content of the current camera.



12.3.1.2.2 Use mouse wheel

Besides drawing a rectangle, it is even more intuitive to use mouse wheel to zoom in and zoom out. Drag-and-drop the view area to change viewport of the camera.



In the corner, find a sub-window showing the full content of the current camera.



12.3.1.2.3 Use the on-screen buttons

A set of control buttons are also available in PTZ controller.



The button controls zoom-in and zoom-out.



The arrow wheel controls pan and tilt of the current camera.

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button will show the entire video image in one view area.



12.4 I/O Control Panel

The status of I/O devices is displayed in panel. You can enable trigger outputs using this panel.





12.5 Content Properties Panel

Properties panel shows the information of the current content in a focus channel. The display information varies according to the type of content in a grid cell and according to the type of the current tab.



Setting	Displayed information in Live View	
Camera	Camera name Video stream profile Video format Resolution FPS (Frames per second) Bit-rate Display type	
E-map	Map name Map description	
Image fusion	Camera name Video stream profile Video format Resolution	

Q	Content Properties Panel is a read-only. The properties cannot be modified through this widget.
Q	Clicking on a camera icon in an E-map will show only the camera name and the video format in the properties panel currently.

12.6 Event List

Event list shows latest events from a camera or from the monitor of system resources, with date/time information and the source. New events are constantly appended to the top of the list and old events will be removed from the list.

Event List			X 101 Camera 4	ø
Time	Event name	Source		
2011/07/05 00:53:2	24 Motion started	Camera 4	Jul / 04/2010 16:49	
2011/07/05 00:53:2	23 Motion stopped	Camera 4	Live Ver State (Including the Areas of Areas and Ar	
2011/07/05 00:53:2	22 Motion stopped	Camera 4		
2011/07/05 00:53:2	2 Motion started	Camera 4		
2011/07/05 00:53:2	1 Motion started	Camera 4		
2011/07/05 00:53:2	20 Motion stopped	Camera 4		
2011/07/05 00:53:1	9 Motion started	Camera 4		
2011/07/05 00:53:1	18 Motion stopped	Camera 4	EDEL STR	
2011/07/05 00:53:1	7 Motion stopped	Camera 4	EDED.	
2011/07/05 00:53:1	7 Motion started	Camera 4	A REAL PROPERTY AND A REAL	
2011/07/05 00:53:1	6 Motion started	Camera 4	and the second se	
2011/07/05 00:53:1	15 Motion stopped	Camera 4		
2011/07/05 00:53:1	4 Motion started	Camera 4		
2011/07/05 00:53:1	3 Motion stopped	Camera 4		
2011/07/05 00:53:1	2 Motion stopped	Camera 4	The second se	
2011/07/05 00:53:1	2 Motion started	Camera 4		
2011/07/05 00:53:1	0 Motion stopped	Camera 4	enuue	
2011/07/05 00-53-	0 Motion started	Camera 4		



If returned results exceed **1000** records, NuClient will pop up a dialog to refine the query.

The list of possible events:

Setting Displayed information in Live View		
Camera	Motion started Motion stopped Recording on manual started Recording on manual stopped Unit connection lost	
Digital Input	Input signal on Input signal off Unit connection lost	
Server	Disk abnormal Auto backup started Auto backup stopped Auto backup failed Recording setting is changed to always recording Recording setting is changed to schedule recording Recording setting is changed to no recording	



When an event is triggered and with associated camera, instant playback of the camera will pop up manually. At most 3 instant playback windows can be opened.

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12.7 I/O

The status of I/O devices is displayed in I/O panel.

12.8 View Panel

This is the main video display area. You may decide which device to be viewed in the area, manually record video, and change configurations of video streams.

12.9 Status Bar

In the status bar, you may see real-time system information including the current date/time, user name, the address of the server you connect to, CPU usage, memory usage, network download/upload bit-rates, and custom text.

12.10 Toolbar

The toolbar provides several quick buttons of functions below:

Graphic Button	Description
ス 2 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5	Toggle full-screen
	Toggle single grid
	The favorite grid layouts. This is configurable in Options.
	Switch different grid layouts
	Take a snapshot
Ō	Remove the content in the selected channel



Full-screen display is supported by desktop NuClient, but not by the web edition.

12.11 Fisheye Camera Dewarp

12.11.1 NUUO Fisheye Camera Dewarp

NUUO Fisheye Camera Dewarp is a generic mechanism for dewarping all kinds of fisheye camera or camera with ImmerVision lens. NuClient supports the <u>Original mode</u>, <u>PTZ mode</u>, <u>Quad mode</u>, and <u>Perimeter mode</u>.

To access NUUO fisheye camera dewarp setting:

- 1. Access the Video Device as described in <u>Configure A Video Device</u>.
- 2. Select the fisheye camera and go to stream tab.
- 3. Select Lens type as Generic Dewarp.

or ¢. ≎		Jve View Playback Config
Image: Sory SNC-CH160 Image: SNC-CH160 Imag	Properties Stream Profile	Recording Schedule Event Action
	Video Format MU Frame Rate: 15	
	Resolution 19 VBR Me	20141320 ·
- 语 DMDO 日 義, Sany SNC CH110 en SNC CH110 日 義, Sany SNC CH210	Lens Type: Camera Position:	
	Format MJP Frame Rate: 5 Resolution: CIF	
	Format: MJP Frame Rate: 3 Resolution: QCI	
	ዎ ጋ 27 5350 / 2011 Inteline 406 Hamme	v usage Tstal 4594MB Free 1423MB Network Displayed streaming bit rate 000 kbps

4. Select camera position

~	et 10		Live View Playback Config
.		Properties Stream Profile Video Fermat	
<u>?</u>	G DI/DO ⊟ 4, ArecontAl/10005 camera	Frame Rate:	
	B 4, Fine MD-D1200 		182011820 •
	E 45, Mobotik Q24M-Secroy ~~ 은 Q24M-Secroy	VBR: Audia	Medium - Enable Audio
	E & Sony		Enable
	G G Sony SNC-CH110	Lens Type Camera Position:	Generic Dewarp
	⊟ 45, Sony SNC-DH210 : +	Format	Ground
		Frame Rate: Resolution:	
		Format Frame Rate:	
		Resolution	
Date: 201		2 5	

5. After Generic Dewarp is enabled, you will see the video on NuClient become fisheye warped image.



12.11.1.2 The Modes of NUUO Fisheye Camera

Dewarp

After NUUO Generic Dewarp is enabled, you may see the selection menu on the PTZ controller is enabled and it has four different options: <u>Original mode</u>, <u>PTZ mode</u>, <u>Quad mode</u>, and <u>Perimeter mode</u>.



12.11.1.2.1 Original Mode







As soon as the rectangle is drawn, the view is smoothly zoomed into the area of interest.

12.11.1.2.2 PTZ Mode





12.11.1.2.3 Quad Mode





12.11.1.2.4 Perimeter Mode



On NuClient grid, there is fast setting. In the content toolbar in the corner, there



is an icon Click on it will lead you to the function icons of PTZ mode.



The featured settings are:

Graphic Button	Description
L.	Return to the toolbar of live view
300°	Original mode. The original image from the fisheye camera without being processed by any image processing algorithm.
彀	PTZ mode. Pan, Tilt & Zoom are computed by NuClient
	Quad mode. Video is split into 4 separate views simultaneously.
	Perimeter mode. In this mode, video is split into a horizontal view of 180°

12.12 Connection Settings

Connection settings are a set of settings to configure stream profiles and aspect ratio. If a camera has dual streaming, then one of the video streams can be chosen to be displayed in Live View.



Using different stream profiles of a camera may make connections become unstable and disconnect more often, because streaming video in different formats and resolutions will require the CPU on cameras to do extra video processing and it may overload a camera.

13.Playback

The common panels are the same as those seen in Live View page, but there are some extra panels in Playback page.



13.1 Content Properties Panel

Properties panel shows the information of the current content in focus. The display information varies according to the type of content in a grid cell and according to the type of the current tab.

Setting	Displayed information in Playback
Camera	Camera name Video format Resolution FPS (Frames per second) Bit-rate Display type
Image fusion	Camera name Video format Resolution

13.2 Content List

Content List shows all the devices a user have permission to access. A device can be a camera, a I/O device, an image fusion, or an E-map.

Each device node as shown in the screenshot below can be expanded to see the details of each device. Expanding each device will show subordinate items, such as sensors on cameras.

13.2.1 Watch Recorded Video

When switching from Live View to Playback, View List, Content List, and event list on the Live View page are identical with the ones on Playback page. Therefore, if you have managed cameras and views, you can select it to check recorded video directly. If you haven't, please refer to the <u>View</u> section to add view and camera.

13.2.2 Toolbar Content

When mouse is hovering over a video channel, you will see a toolbar in the corner similar to that in Live View.

Graphic Button	Description
C *	Snapshot.
(Enable/disable audio.
$\boldsymbol{\varkappa}$	Change the aspect ratio of a video

13.3 Event List

The event list in Playback is slightly different and it offers a search interface with several parameters to locate events in recording files.

Event List						×
Start time:	Start time: 2010/8/1 12:15:47				0	
End time:	2011/	/8/26 14:15:47			ŧ	
Source type:	All				•	
Server:	Titan_	NuClient			•	
Source:	Source: Titan_			ensor	•	
Event name:	All				•	P
Time		Event name		Server		4
2011/07/04 23 2011/07/04 23 2011/07/04 23 2011/07/04 23 2011/07/04 23 2011/07/04 23 2011/07/04 23 2011/07/04 23	3:3 3:3 3:3 3:3 3:3 3:3 3:3	Motion started Motion started Motion started Motion started Motion started Motion started Motion started Motion started Motion started Motion started		Titan_NuC Titan_NuC Titan_NuC Titan_NuC Titan_NuC Titan_NuC Titan_NuC Titan_NuC Titan_NuC Titan_NuC	Client Client Client Client Client Client Client	•
		« <	0-	100/1000	>	► ≫

13.4 Search Panel

In search panel, search for motion in videos.

13.4.1 Motion Search

Motion search is the utility that enables you to search for the video frames with motion in the video quickly and accurately.

Search >	<
Content name: Axis	
Motion Search -	
Motion Search Parameters	
Pixel Sensitivity: 80 🗘 %	
Zone Sensitivity: 80 🗘 %	
Consecutive frame hits : 2 🖨 Frame(s)	
Check frame every 1 second(s)	
Zone Tools	
🖌 🕂 🗢 🖊 🖾 🕮	
Motion Search Period 10 🔋 Minute(s)	

The featured settings are:

Setting/Graphic Button	Description	Default		
Content name	e Shows the content name.			
Motion Search •	Sets the search type.			
	Sets motion search	parameters below:		
	Setting	Description	Default	
Motion Search Parameters	Pixel Sensitivity	It refers to the pixel change between two compared frames. 90% indicates that above 90% of the pixels between two frames are different. The value ranges from 1% to 99%.		
	Zone Sensitivity	It refers to the percentage of different grid boxes between two compared frames. 80% indicates that when more than 20%, that is 100% – 80%, of the content of the selected grid boxes is different, one motion event		

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		 will be issued. The higher the value is, the more sensitive the detector is. The value ranges from 1% to 99%. 	
	Consecutive Frame Hits	It refers to the minimum number of frames with motion to trigger a motion. Setting it to 2 means that a motion will be detected only when a motion spans over at least 2 frames. The value ranges from 1 to 30 frames.	
	Check frames every <u></u> seconds	It refers to the number of seconds between two compared frames. The number can range from 1/60, 1/30, 1/20, 1/15, 1/10, 1/5, 1/3, 1/2, 1, 2, 5, 10, 15, 30, 40, 50, 60.	
	A	Enables/disables motion search	
	•	Selects detection region	
	•	Deselects detection region	
		Selects/deselects an region	
		Draws a rectangle	
		Selects/deselects all	-
		Inverts selection / de-selection	
+	Moves to the backward search.		
>	Moves to the forward search.		
Motion search period minute(s)	Sets the motion search interval.		10 minutes

- 1. Select an active channel and go to the motion search tab.
- 2. Click on the icon and motion search will be enabled.

When motion search is enabled, the content tool bar of a content cell will be disabled. To enable the toolbar, please disable motion search by clicking March again.

- 3. By default, the whole visible region is not selected, and the plus icon is default enabled.
- 4. You may start to select the areas of interest. You can combine



to select the region you need, or select used to select all region.

and

5. The selected regions will show in red.



6. Pressing



to invert the selection/de-selection.



- 7. After the region selection is done, you may click on the search icon at the button of the tab.
- 8. refers to backward search and refers to forward search. By default, the search period is 10 minutes.

Motion search does not support search under digital PTZ or ImmerVision mode.

13.5 Timeline

Timeline is a user-friendly representation of time and recorded data. You may not only quickly have an overview of the time span of video files, but also quickly locate the video at a specified time.

13.5.1 Search in Timeline

The timeline is a user-friendly interface to quickly find the video of a certain time period.
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Time Sp	an											×
	10:05	10:10	10:15	10:20	10:25	10:30	10:35	10:40	10:45	10:50	10:55	11:00
101												
102												
104												
	Wednesday, 2011/08/24	10:32:25									►.	e و
											1	

The featured settings are:

Graphic Button	Description
Wednesday, 2011/08/24 09:35:20	Date/Time selection
4	Event browsing settings
<u>م</u>	Zoom out
, ₽	Zoom in

1. Drag the timeline to the time.





If video content is an **image fusion**, as long as one camera has recording data, a timeline will be displayed in the area for the video content.

It is possible that a camera has two video streams of different video profiles. If one camera is placed in two grid cells, two timelines will be drawn for each grid cell.

2. When mouse is hovering on both the ends of the timeline, an arrow icon will show up. Click on it will browse through time more quickly.

e Span	00.10	00.50	00.00	00.40	00-00	00-20	00-10	00-50	40.00	40.40	40.20	40-20
1	08:40	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30
2 3 4			++++					+ + ++				+ + +
•												
Wedr	nesday, 2011/08/24 09	9:35:20										Ģ
Wedr	nesday, 2011/08/24 09	9:35:20									4	<i>,</i> •
	nesday, 2011/08/24 09	9:35:20										٩
e Span	nesday, 2011/08/24 05 08:40		09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	
e Span			09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10) 10:30
span			09:00	09:10	09-20	09:30	09:40	09.50	10.00	10:10		

3. The two icons in the corner zoom in and out the timeline.

Time Span												
	16:00	18:00	20:00	22:00	00:00	02:00	04:00	06:00	08:00	10:00	12:00	14:00
101 102				_								
03												
)4												
Wedr	nesday, 2011/08/24	03:06:13										₽.
-												
ne Span												
01	02:40	02:45	02:50	02:55	03:00	03:05	03:10	03:15	03:20	03:25	03:30	(

404	02:40	02:45	02:50	02:55	03:00	03:05	03:10	03:15	03:20	03:25	03:30	03:3
101 102		1-1-1	1		E E			11 11 81 81 11				
103 104												
_											<u> </u>	
	Wednesday, 2011/08/24 03:06:1	3										,

4. Specify the date / time directly using the widget in the corner.

O2:40 August 2011 31 1 2 3 4 7 8 9 10 11 14 15 16 17 18	5 6 . 12 13	02:50	02:55	03:00	03:05	03:10	03:15	03:20	03:25	03:30	03:
81 1 2 3 4 7 8 9 10 11 14 15 16 17 18	5 6 . 12 13					++-+++	11 11 11 11 11		81 81 81 81		
4 15 16 17 18	. 12 13										
4 15 16 17 18											
10 10 10 10	19 20										
21 22 23 24 25	26 27										
28 29 30 31 1	2 3										
4 5 6 7 8	9 10										

5. The dates with recording data are shown in boldface.

G		Aug	ust, 2	2011		9
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10





6. Change event browsing settings. In Timeline, event-triggered recording data can be shown in different colors. Locate video files more quickly by enabling event browsing in different colors. If you uncheck the event items in the list, the markers of event video will not be shown in Timeline.

Event	Color	
🖃 📝 Camera		
Motion started		
··· 📝 Motion stopped		
🔽 Unit connectio		
Manual record		
🔜 🔽 Manual record		
🖃 📝 DI		
\cdots 📝 Input signal on		
🤐 📝 Input signal off		
		🤍 🔍 🚽

Click on the color bars will open the color palette.

Select Color	×
Basic colors	
Custom colors	Hue: 60 therefore Red: 255 there

7. You may change the layout of the timeline if using the horizontal layout is not convenient.



i 🐨 🗸		Live View Playback	
View List X	No Content Assigned	No Content Assigned	Time Span X
 ■ Public Views ■ ■ Private Views 			101 102 103 104
···· New View			22:00
+-* 🖉 🗉			00:00
Content List X			
🖃 Image Fusion			02:00
<u> </u>			
م			04:00
PTZ Panel X			
Event List X			06:00
Start time: 2011/12/16 09:5	No Content Assigned	No Content Assigned	
End time: 2011/12/16 11:5			08:00
Source type: Camera			
Server: titan_4040_Tob			10:00
Source: titan_4040_Tob			12:00
Event name: Motion started			14:00
Time Event nar			
			16:00
			18:00
	× < < ► > » ► 08:37:12 <		20:00
		• • • • •	🎹 2011/12/16 0837:12 🕨 🔎 🔎
Event List	1:32:00 User name: admin Server address: 192.168.1.181:5250 CPU load		

13.6 Time Navigation / View Toolbar

Time navigation is a set of navigation buttons, scroll bars, and image exporting tools.

You can open the system in different screen resolutions and the window can be resized to fit your needs.

Each component in the interface is a dockable widget which can be placed anywhere in the current window. You may resize each of the components by clicking on the edges of dockable widgets, and you may arrange them in the way you like. Please see the following screenshot for an example.



Live View can be displayed both in the primary monitor and in secondary monitors, but Playback can open only in the primary monitor.

13.6.1 The Playback Control Panel

The control panel can be divided into four different parts which are, from left to right, playback control, the date/time display, timeline browsing, event browsing control, and the toolbar icons.



13.6.2 The Playback Control



Setting	Description
Playback / Reverse Playback	Click to plays videos. When video is being reversely played, the focused channel will play according to the specified frame rate, and the unfocused channels will play at 20 frames per second.
Step forward/backward	Click to play one frame next/last to the current frame.
Next/Previous	 Click to set the current frame to that one in next/last interval. See also the <u>Playback</u> of Client Configuration.
Speed	Click to change alter the speed from 1/16x to 64x.
Speed Shuttle	Click to quickly scan through video forwards or backwards. The speed can be adjusted by dragging the handle. For example, when you drag the handle towards the right-hand side, forward playback will start. The playback speed is determined how far away the handle is from the original

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	position. If you drag the handle towards the left-hand side, reverse playback will start.



If video is being played at a faster speed, the audio will not be heard.

13.6.3 The Date / Time Display

It shows the playback status, the date/time of the current video frame, the speed of playback.

13.6.4 Event browsing control

The event browsing control is a quick interface for you to move between the time points when event occurs.



Graphic Button	Description
<	Moves to the previous event.
>	Move to the next event

13.6.5 The Toolbar Icons

The toolbar icons are a quick interface for you to operate functions, for example: change grid, export, snapshot and remove schedule.



Graphic Button	Description
ズ ユ	Toggle full-screen
	Toggle single grid
	Switch different grid layouts
•	Set cue-in point
0	Set cue-out point
	Export video
	Take a snapshot
Ō	Remove selected channels

13.7 Export Video

Video exporting is a tool for converting the video of a specified time span into commonly-used video formats so that the video can be played with other video player applications, such Windows Media Player and <u>VLC</u>.

1. Click on the cue-in icon.



2. You will see an icon on the timeline indicating the start of the video to be exported.



3. Click on the cue-out icon.



4. You will see the icon indicating the end of the video. And the edges of start time and end time are draggable. You may drag them to modify start time and end time.



5. Click on the export icon.



 A dialog will be opened to ask for the parameters to configure the video to be exported. The supported video formats are ASF, Original AVI, and Microsoft AVI. You may enable "Export audio" and "Export title information". They are not enabled by default.

Export Video	×
Export path:	D:\VIDEO
Export file name: (video-export
Export Format	
Fomat: ASF	•
Profile: Window	vs Media 8 for Local Area Network (256Kbp: 👻
Export Option	
Start time: 12/	13/2011 7:38:44 AM
End time: 12/	13/2011 7:42:21 AM
Export aud	lio
Export title	information
(OK Cancel

\bigcirc	The maximum filename length of export files is 64 characters.
	If there is a video format change in your selections, NuClient will save video data of different formats in different files and number them properly.
	The start time and the end time are modifiable in the export dialog. You may click on the numbers you feel like changing and press KEY UP and KEY DOWN.

Export Fo	ormat
Fomat:	ASF 🗸 🗸
	ASF
Profile:	OriginalAVI
	MicrosoftAVI

If the export format is ASF, you can choose different video profiles.



7. After OK is pressed, the video will be exported and can be seen in the target folder when the exporting is completed.



13.8 Snapshot / Print

See the section of <u>Snapshot</u> for details.

14.Log Export

Whether the **Crystal Titan** is serving as a **Management Server**, **Recording Server** or **Metadata Server**, follow the guide below to export the log recorded during a period of time:

- Image Fusion
 Image Fusion<
- 1. Access the Live View tab.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.



3. Click Log Export.

A Log Viewer dialog opens.

Log Viewer		\times
Start time:	Saturday, 2013/07/06 22:26:18	
End time:	Sunday, 2013/07/07 22:26:18	
Server:	🖶 NVR Management Server 🔹	
Export		

Setting	Description						
Start time	 Sets the moment from which the log to export starts Click the calendar icon to open a calendar for date selection. 						
End time Sets the moment at which the log to export stops. Click the calendar icon to open a calendar for date selection. 							
Server	 Sets which server to collect the log. Options available are: NVR Management Server, NVR Recording Server and NVR Metadata Server. 						
Export button	Opens a Log file path window to browse where to export the log file. The log file are saved as *.csv file.						

15. Backup

Backup is a utility for exporting video in its original format without any format conversion. It is different than exporting video. The format of video is not converted in video backup.

- 1. Access the Live View tab.

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.

e ~
Update to server
Log Export
Backup Tool
E-Map Editor
Image Fusion Editor
Client Configuration
Import / Export Configuration 🕨
About
Logout
Exit

3. Press the Add Period icon in the corner of the opened dialog.



4. After the icon is pressed, a timeline dialog will open.



5. The interface is quite similar to the timeline in the Playback interface.

Select Period	Select / Unselect all channels	×
AV5100 DCS-6620 6620	22:10 22:20 22:30 22:40 22:50 23:00 23:10 23:20 23:30 23:40 23:50 00:	
fdasfsadfs Sony SNC- 2 Axis-Q175: 1 5105	/ideo selection Cue in / out Playback / Reverse Playback	
Thursday, 2011	1/2/15 23:04:15 0000/00000, 00:0 × 200 1/2/15 23:04:15 0000/0000, 00:0 × 200 Paused Thursday, 2011/1/2/15 0000/0000, 00:0 × 200 Priving all (2):000 Cancel	

6. Select a camera and specify the cue-in time.

AV5100	21:10 21:20 21:30 2	21:40 21:50 22:00 22:10 22:20	22:30 22:40 22:50 2	
DCS-6620				
fdasfsadfs —				The Intelligent Surveillance Solution
Sony SNC- —				Survey and
2 —		22:01		
Axis-Q175:				
5105 -				S S La Station
Axis —				
1612				22:01:46 2011/12/15,22:01: 5

7. Select a camera and specify the cue-out time. Click the OK button when the selection is done.

	21:10 21:20	0 21:30 21:4	0 21:50 22:0	22:10 22:20	22:30 22:40	22:50 23:00			UUO
DCS-6620									
6620 fdasfsadfs								The Intelligent S	
Sony SNC-					1			Care and	
2			22:01	22:09			12		
Axis-Q175:							1		
1				_				S . •	- Section
5105							in the second	•	
Axis							1x	22:09:	2011/12/15, 22:01:46
1612								77.UQ.	55

- 8. In the list, you may find the list of selected video data. Clicking OK will start backing up the video data.
- 9. If you have "**Include Backup Player**" enabled, then you will find **Backup Player** in the exported folder. You may playback video files using the playback application.

Ва	ckup Tool			×
	Backup location:			
	I Include Backup	Plaver (29 MB)		
	Backup period(s):	, (202)		
	Start time	End time	Camera	Size
	2011/12/15 22:0	2011/12/15, 22:0	1612	1968MB
	+-			Total: 1997 MB
			Backup	Cancel

10. With the camera video to be exported and the cue-in/out time specified, the original video files will be exported to the target folder.



11. When it is completed, you will find video files in the backup directory. If you have **Include Backup Player** enabled, you will also find a playback application in the directory.



16.Export Config

The **Export Config** tool is featured to save the **NuClient's** configuration to a file so such file can be loaded to recover the system configuration in a painless manner. This will save users from spending great time and efforts in reconstituting the system configuration.

To use the Export Config tool:

1. Access the **Config** tab.

• چ		Live View Playb 🗙 Contig
	 Control Server Recording Server Matix Stativary I denice Matix Interfact Server Interfact Serv	Properties Lones Server Overview SMTP Address Book Vert Action Name Mittee Management Server Description Image: Control of the Management Server 2 as 0.0000 Server 2 as 0.00000 Other Description Image: Control of the Management Server 2 as 0.00000 Description Image: Control of the Management Server 2 as 0.00000 The zoner UTC + 000000 Description Image: Control of the Management Server 2 as 0.00000
Date: 2013	/08/20 Time: 14:20:45 Usemame: admin Sen	000 kpg = 2000 kpg = 2

2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.



3. Click Import/ Export Configuration and click Export configuration

The **Export Config** tool launches.



4. Select the configuration to save.



5. Click the ellipsis (...) button at the right side of the **Export path** field.

Export file path							×
	JUO\Titan\Fake_NuClient_beta\h	NuClient_b	eta 👻	• • •		::	
🔊 My Computer	Name	Size	Туре	Date Modified			
	dump		Filder	2013/10:12	_		
[k jcc 🍵	imageformats		Filder	2013/10:12			
	PDB		Filder	2013/10:31			
	ShareLib		Filder	2013/10:32			
J	Translations		Filder	2013/10:34			
	wave		Filder	2013/10:34			
9	123.zip	1 KB	zip File	2013/10:12			
File nome:							
File <u>n</u> ame:							
Files of type: Zip files(*.z	ip)			•	C	ancel	

An explorer window opens.

- 6. Browse where to save the configuration file.
- 7. Enter a name for the configuration file in the **File name** field. Click the **Save** button.

The selected configuration is saved as one *.zip file at the assigned folder.

17.Import Config

The **Import Config** tool is featured to load a copy of the **NuClient's** configuration saved as a file in the disk drive so it is painless to reconstitute the system configuration.

To use the Import Config tool:

1. Access the **Config** tab.



2. From the **Top Toolbar** of the **NuClient**, click the "global" icon 🕏.

The menu opens.

3. Click Import/ Export Configuration and click Import Configuration



The Import Config tool launches.

Import configuration	on		×
Configuration:			Load
Server configurati	ion:		
		Configuration	
			Cancel

4. Click the ellipsis (...) button at the right side of the **Configuration** field.

An explorer window opens.

Import Option						,	ĸ
Look in: 🛛 🕌 C:\Z\N	JUO\Titan\Fake_NuClient_beta\/	luClient_l	oeta 👻	• • •		•)
🔊 My Computer	Name	Size	Туре	Date Modified			
	dump		Filder	2013/10:12			
[k jcc 👔	imageformats		Filder	2013/10:12			
	PDB			2013/10:31			
	ShareLib			2013/10:32			
	Translations			2013/10:34			
	wave	4.175		2013/10:34			
	123.zip	1 KB	zip File	2013/10:12			
File <u>n</u> ame:							
Files of type: Zip files(*.z	ip)			•	Ca	ncel	

5. Browse for the saved configuration file. Click the configuration file.

Import Option											×
Look in:		JUO	_		•	e	۲	٠		=	
Ny Co	mputer	Name Titan 00.zip	-	Size	Type Filder zip File		135	:00			
File <u>n</u> ame:	00.zip								<u>c</u>)pen	
Files of type:	Zip files(*.z	ip)		 					C	ancel	

The configuration file becomes highlighted.

6. Click the **Open** button at the right side of the **File name** field.

The explorer window closes.

7. Click the **Load** button at the right side of the **Configuration** field.

The available configuration(s) then shows in the lower half of the **Import Config** tool.

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It is suggested that all types of configuration be export and import simultaneously to ensure the configuration is intact.

Impo	ort Configuration	×
		evonne_tsai/Desktop/Configuration/configuration.zip
Sen	ver configuration:	
	Target server	Source server
Ξ	Management Server	
	Recording Server 2	Recording Server 2
	Recording Server 4	Recording Server 4
	Recording Server 1	Recording Server 1
	Recording Server 3	Recording Server 3 -
	Metadata Server 1	
		Configuration
	System configuration	1
	NuClient configuration	on
	Client application co	nfiguration
		OK Cancel

- 8. Select the configuration to load and deselect the configuration that you don't want to load.
- 9. Click the **OK** button.

The selected configuration is imported to the system and replaced original configuration.

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The hardware between source server and target server is strongly suggested to be the same.

It is suggested to import one server configuration into one target server. Please not import one server configuration into multiple target server.

18.Video Wall

To enlarge the management efficiency of big projects, NUUO NuMatrix, provides an advanced centralized viewing solution that supports unlimited channels of live viewing, without any monitor counts limitation per computer.

The followings are components.

Component	Description
NuMatrix application	Install in the computer as Matrix Server.
Matrix settings	The Matrix Server settings on NuClient-Config tab
Matrix Console	Control all monitor on NuClient
Matrix profile	A group of monitors and Views setting for monitoring efficiency

18.1 Matrix Application

- 1. Install NuMatrix application on the computer as Matrix Server. For NuMatrix installation process refers to <u>Application Installation</u>.
- 2. On Windows, click "Start", and then click NUUO Crystal NuMatrix to launch NuMatrix application.



3. Select instance name and click OK to launch NuMatrix.



4. Go to options for detail setting or add new NuMatrix application. For new NuMatrix application, assign a new port to differentiated different NuMatrix application.

Then click on "OK".

	MatrixName	Port	Auto Startup	Monitor 1	Monitor 2
	default	5350			
2	NuMatrix	5450			
3	NewMatrix	5550			
-	-				
	•				

Setting	Description	Default
MatrixName	Names the Matrix.	"default"
Port	Provides port of the Matrix.	5350
Auto Startup	Start the Matrix automatically	Enable
Monitor 1	Show Matrix on Monitor 1	Enable

- 5. Then go to NuClient | Config tab| Physical Config| Matrix to add the NuMatrix Server to the system. For NuMatrix setting refer to <u>Config Matrix</u>.
- 6. For Matrix control priority and access privilege refer to Priority and Matrix.



Once installed NUUO Crystal NuMatrix application and go to Matrix config on NuClient, please make sure NUUO Crystal NuMatrix is still operating when add the Matrix Server on NuClient | Config.

18.2 Matrix Console

The Matrix console is the primary location for controlling the matrix display. It displays all the monitors you have added to the Management Server on your section of NuMatrix. Multiple monitors for one Matrix server setting are an available option. NuMatrix has no inherent limitation when it comes to the number of monitors.

For NuMatrix setting refer to Config Matrix.



Please note that only when have an "Ultimate level" license will you be able to see the Matrix interface on NuClient.





To launch Matrix console:

1. Connect to NuMatrix Server

Focus on the NuMatrix application. Then click "Connect" in Matrix Console toolbar.

User Manual



When select the view, the featured settings are:

Graphic Button	Description
W	 Select Profile There are two options: Public profile and private profile once set on view list.
	Select View
	View 1x1
\blacksquare	View 2x2
	View 1+5
\blacksquare	View 3x3
211	Switch Grid Type
Ō	Remove selected content
S	Connect Matrix

User Manual



When select the camera, the featured settings are:

Graphic Button	Description
漢	 Select Profile There are two options: Public profile and private profile once set on view list.
	Start/stop Manual Recording
€⊘	Enables/disable audio
8	Connect/disconnect
*	 Content Setting There are two options: stream profile or fixed profile. Select auto or original for stream profile.
	Single Grid
Ō	Remove selected content
S	Connect Matrix

18.2.1 Add camera to Matrix

1. Access the Live View tab.



2. Click Content list.

Drag and drop a single camera or a sensor to Matrix.

OR

Drag and drop a server to a grid cell. Then the camera's video will show in Matrix.

User Manual



18.2.2 Add view to Matrix



1. Access the Live View tab.

2. Click View list.

Drag and drop a private view or a public view to Matrix.



18.3 Matrix Profile List

The Matrix profile makes setting up multiple monitors and views more convenient. It consists of a group of settings for the "Monitors" plus "Views" enabling rapid switching of the viewing target.

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Please note that only when have an "Ultimate level" license will you be able to see the Matrix interface on NuClient.

To launch the Matrix Profile List:

1. Access the Live View tab.



2. Click the Matrix Profile list



3. Select the type of profile, either Public or Private, to be created.



4. Click on the add sign icon +.



5. Click on Add Profile.



4. A new view named "New Profile" by default is appended to the root.



5. Drag a view to the matrix profile, view will fill up in the NuMatrix monitor.



6. NuMatrix monitor will display the view.

When select the view, the featured settings are:

Graphic Button	Description
展	 Select Profile There are two options: Public profile and private profile once set on view list.
	Select View
	View 1x1
\blacksquare	View 2x2
	View 1+5
	View 3x3
211	Switch Grid Type
Ō	Remove selected content

User Manual

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Connect Matrix

When select the camera, the featured settings are:

Graphic Button	Description
Ţ	Select Profile There are two options: Public profile and private profile once set on view list.
	Select View
	Start/stop Manual Recording
4 0	Enables/disable audio
&	Connect/disconnect
*	 Content Setting There are two options: stream profile or fixed profile. Select auto or original for stream profile.
	Single Grid
	View 1x1
	View 2x2
	View 1+5
	View 3x3
22	Switch Grid Type
Ō	Remove selected content
G	Connect Matrix

19.Help

To use the **Help**:

1. Open the **NuClient** settings as described in <u>Settings</u>.

The NuClient settings open.

2. Click the **Help** icon **I** from the **Config Catalog**.

The **Help** then opens onscreen and shows the useful tools.



Setting	Description
Quick Start	The quick start document helps to start the system.
NUUO Wiki	The useful Q&A helps to install the system.
Demo Video	The demo video helps to install the system.
Design Tools	The design tools help to design the system.
Download	The download helps to download latest firmwave for the system.
eHelpdesk	The eHelpdesk helps to reply any issue to install or process the system.
Compatibility List	The compatibility list helps to provide latest compatibility list with other device(s).

User Manual

Client Hardware Requirement	The Client Hardware Requirement helps to design the NuClient and NuMatrix system requirement.
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The Help information will be available when connect to Internet.