CORTROL Technical Training Manual V1.0.4





Technical Training Manual



Table of Contents

2.	Har	dware Requirements	3
3.	Prei	requisites	4
4.	0pe	erating System Setup	4
	1.	User Account	5
	2.	Windows Service vs Process	5
5.	Con	inections	6
	1.	Server LAN Setup	7
	2.	IP Camera Configuration	8
	3.	Windows Firewall	8
	4.	DHCP	8
	5.	PixelPro Multi Upgrade Tool	9
	6.	PixelPro GXi IPAdminTool	10
	7.	GENSTAR IPSearchTool	11
6.	COR	RTROL Download	12
	1.	Install & Activation	13
	2.	Activate Existing License Key	14
	3.	Offline Activation	14
	4.	Request Free CORTROL Prime License Key	16
	5.	Evaluation License	17
	6.	Quick Setup Wizard	18
7.	COR	RTROL Configuration	20
	1.	Devices	20
	2.	New Device Group	24
	3.	Channel	27
	4.	Create Channel Group	28
	5.	Channel Properties Edit	31
	6.	Assign Main Stream Recording Configuration	35
	7.	Recording Profiles	37
	8.	Users and Users Groups	42
	9.	Maps	48
	10.	Layout Templates	54
	11.	Visual Groups	55
	12.	Streaming Server	57



EAST COAST +1 (919) 230-8700 | WEST COAST +1 (310) 222-8600 | MEXICO +52 (55) 5280 4660 Ganzsecurity.com ©2016 CBC AMERICAS Corp. All Rights Reserved

CBC AMERICAS Corp.



	13.	Events & Actions	64
	14.	Events & Actions – 4 Exercises	76
	15.	Monitoring	80
	16.	Audit	82
8.	Proble	em Report Wizard	86
9.	COTRO	DL Quiz (Open book)	89
10.	Cou	rse Evaluation	92
11.	Che	ck List – CORTROL Setup	93
12.	COR	TROL Technical Training – Notes 1	95
13.	COR	TROL Technical Training – Notes 2	96





2. Hardware Requirements

The table below details the minimum recommended hardware sets for CBC AMERICAS, Corp. software. Please note that these specific processor models are given only as examples and are not compulsory. A different CPU may be used, provided that it has the same number of threads and its performance is analogous.

Calculations are given for two major configuration examples: all video streams in D1 or Full HD resolution. Of course, intermediate and mixed cases may also exist. Please contact CBC AMERICAS, Corp. representatives if you require help with choosing hardware.

		HARDWARE REC	OMMENDATION	TABLE	
I	nstallation spec	ifications	Recommer	nded hardware per usag	ge scenario
Video Stream	Number of cameras	Motion Detector	Server only	Monitor only	Server + Monitor
	Up to 9	None or camera side	CPU: Intel G1840 Ram 4GB	CPU: Intel G4500 Ram 4GB	CPU: Intel i3-6300 Ram 8GB
		Software HP			
D1 20fmc		Software HA			
D1 301b2	Up to 16	None or camera side	CPU: Intel G1840 Ram 4GB		
		Software HP		CPU: Intel i3-6300 Ram 4GB	CPU: Intel i5-6600 Ram 8GB
		Software HA	CPU: Intel i3-6300 Ram 8GB		
		None or camera side	CPU: Intel G1840 Ram 4GB		
	Up to 9	Software HP	CPU: Intel G4500 Ram 4GB	CPU: Intel i5-6600 Ram 8GB	
Full HD 30fps		Software HA	CPU: Intel i5-6600 Ram 8GB		CPU: Intel i7-6700
		None or camera side	CPU: Intel G4500 Ram 4GB		Ram 8GB
	Up to 16	Software HP	CPU: Intel i3-6300 Ram 8GB	CPU: Intel i7-6700 Ram 8GB	CPU: Intel i7-6700 Ram 16GB
		Software HA	CPU: Intel i7-6700 Ram 8GB		CPU: Intel i7-5930K Ram 16GB

Notes:

- DDR4 RAM is strongly recommended
- *Please refer to the list of Ganz CORTROL supported cameras for camera-side motion detector support
- **High Performance/High Accuracy mode
- ***System must provide:
- DirectX 10 support
- Graphics card with at least 256MB memory
- Latest graphics driver version





3. Prerequisites

There are a number of requirements for the Ganz CORTROL host system:

- Microsoft Windows operating system (7 SP1, 8, 8.1, 10, Server 2008 R2, Server 2012 R2)
- Both .NET Framework 3.5 SP1 and 4.5 installed
- Defragmentation should be turned OFF for storage locations
- Ports for remote connections should be enabled through the firewalls (default ports are 60554 for Ganz CORTROL Client and 8080 for streaming server)
- Installation and recording directories should be added to antivirus exception list so that they are not scanned or interfered with in any other manner
- For software analytics requirements, see the corresponding section of the VCA manual
- For Ganz CORTROL Client application, DirectX 10+ is required along with the latest stable graphics card drivers

Note 1: Virtualized environment is not supported for Ganz CORTROL Prime and Premier, as they require license activation, which can be obstructed within the virtual environment. However, virtual machines can be used as host systems for Ganz CORTROL Global based recording servers.

Note 2: Antivirus scanning being enabled for Ganz CORTROL recording files may result in dramatically decreased write speed, recording disturbances, and on occasion, database corruption.

CBC AMERICAS, Corp. is not responsible for software failures and/or footage loss caused by underlying OS and/or hardware issues on non-Ganz supplied servers. It is the responsibility of the systems administrator to configure the server and provide maintenance, unless otherwise agreed (e.g., if server hardware has been shipped by CBC AMERICAS, Corp.).

4. Operating System Setup

The Ganz ZNR / CORTROL system is configured with windows default settings, except for "Windows Updates" and Power Management."

- Windows Updates should be configured for "Notify to download" or "Manual download." The reasoning is that if an update creates an issue, the administrator is made aware of it immediately after the update. If "Updates" are set to automatic, there can be a delay in administrator notification and/or system troubleshooting. A delay can result in the loss of critical data.
- Windows Power Management should be configured for maximum performance, with sleep mode disabled. If sleep mode is left running, then the ZNR Server could be put into sleep mode, thus losing its recordings during that time.
- It is highly recommended that the default user ID and password configuration be changed for security reasons. The default password should be changed by the CORTROL Server administrator, written down, and stored in a secure fashion to prevent unauthorized access or modifications to the system. The following steps can be used to change the password for the Windows operating system account:
 - Access the Start Menu > Settings > Control Panel > User Accounts
 - Pick the account to be changed, or create a new account
 - Select Change Password





1. User Account

Default Operating System Settings	New Operating System Settings		
Username: admin	Username: admin		
Password: "No password"	Password:		
Privileges: Administrator	Privileges: Administrator		

New Operator/User Settings	New Operator/User Settings	
Username:	Username:	
Password:	Password:	
Privileges: Manager or User	Privileges: Manager or User	

2. Windows Service vs Process

What is a service?

A service is a special type of application that is available on Windows XP/7/8/10 and runs in the "background." Services can have special privileges that regular applications do not. For instance, on a limited user account a service could access certain parts of the Windows Registry that a regular application could not access. Most Windows Services do not have a user interface and are loaded when Windows starts.

What is a process?

A process is normally some kind of application program running on a system. Processes can execute on start up, and many can also be found running in the background. Some processes are even executed more than once. For instance, opening Windows Task Manager will most likely show multiple instances of "svchost.exe" processes running simultaneously. If Internet Explorer is executed more than once, multiple instances of "iexplorer.exe" processes will be seen in Task Manager in this same way.

CORTROL as a service

The CORTROL Recording Server installs as a service, while the Management Console and Client install as processes. Once the Ganz CORTROL Recording Server begins recording video, it will continue to do so, even if no user is logged in and/or no CORTROL Client is running. CORTROL will stop recording only if the following conditions are met:

- The ZNR / CORTROL Server is powered off
- The CORTROL Server service is stopped (Windows Services)
- The CORTROL Server executable process is stopped (Windows Task Manager)

To prevent this from happening inadvertently or maliciously, the ability to shut down the computer or access the operating controls should be restricted by use of a restricted user account if the server is administered by anyone other than an administrator.





5. Connections

The ZNR 2U/4U, Raid Lite, and Full Raid based servers have a minimum of two 1Gbps network cards. The ZNR-Mini based servers come with a single 1Gbps network card, with the option of a second 1Gbps network card.

It is recommended for optimal network performance to use LAN 1 for all corporate or local data, while a separate physical network for use by the IP cameras is connected to LAN 2.

Example of a dual server CORTROL Premier with multi-client configuration







1. Server LAN Setup

By default, the LAN(s) of the server may require configuration. In order to configure a LAN, go to Windows Control Panel, and select *Network and Sharing Center*.

From the *Network and Sharing Center*, select *Change adapter settings* located toward the left, and near the top of the window. Once *Change adapter settings* is selected, the available LANs of the server will appear.

Right click on the LAN requiring configuration, which may be LAN 1 (meant for the internal or corporate network), or LAN 2 (meant for the camera network), and select *Properties.*



From the LAN Properties window, locate and select *Internet Protocol Version 4(TCP/IPv4)*, then click on *Properties*. If the option is not already selected, select *Use the following IP address* in order to configure the LAN properties for CORTROL.

The goal in configuring the LAN properties is to set the IP address for the corporate side, and/or the LAN properties for the camera side, in order to establish network communications. Enter the IP, Subnet, Gateway, and DNS as required by the specific LAN (repeat for each LAN as required). Select *OK* when completed, then close all windows to return to the windows desktop.

LAN 1 Properties	×	Internet Protocol Version 4 (TCP/I	Pv4) Properties
Networking Sharing		General	
Connect using:	t	You can get IP settings assigned a this capability. Otherwise, you ne for the appropriate IP settings.	automatically if your network support ed to ask your network administrator
Configure		Obtain an IP address automa	atically
I his connection uses the following items:		Use the following IP address	
Client for Microsoft Networks File and Printer Sharing for Microsoft Networks	^	IP address:	192.168.1.5
QoS Packet Scheduler		Subnet mask:	255.255.255.0
 Link-Layer Topology Discovery Responder Microsoft LLDP Protocol Driver 		Default gateway:	192.168.1.1
Internet Protocol Version 4 (TCP/IPv4) General NDIS Protocol Driver	~	Obtain DNS server address a	utomatically
< >		 Use the following DNS server 	addresses:
Install Uninstall Properties		Preferred DNS server:	192.168.1.1
Description Transmission Control Protocol/Internet Protocol. The default		Alternate DNS server:	
wide area network protocol that provides communication across diverse interconnected networks.		Validate settings upon exit	Advanced.
0K Canc	cel		OK Cano





2. IP Camera Configuration

The IP Camera Configuration section describes the utilization of camera configuration software provided by Ganz. The camera configuration software is for Ganz IP camera configuration, used prior to configuring the Ganz CORTROL Recording Server.

The Ganz provided camera configuration software covers the PixelPro, PixelPro GXi, and GENSTAR IP camera lines.

Most cameras can be installed with the following steps:

- Confirm the camera has the latest firmware version by checking <u>www.ganzsecurity.com.</u>
- Configure the cameras with a fixed IP address as shown in this document.
- Test camera-to-server communications by navigating to the camera from the browser.
- Consult with Ganz support for additional information as required.

Each Ganz IP camera comes with a utility to find the camera on the local network and set its IP address. This utility is typically available on the software CD shipped with the camera, or from the Ganz web site. Please refer to the documentation provided with your camera if you have questions after reading this guide.

3. Windows Firewall

If Windows Firewall is enabled on the computer, the following dialog box will be seen when any of the camera manufacturer's utilities are run. Click Unblock to allow access, and for the utility to work properly.

🔐 Windows Sect	urity Alert		Х
💮 Windo	ws Firewal	I has blocked some features of this app	
Windows Firewall h networks.	as blocked som	e features of IP Camera Upgrade Tool on all public and private	
	Name:	IP Camera Upgrade Tool	
<u>See 1</u>	Publisher:	Unknown	
	Path:	$\label{eq:c:lusers} C:\label{eq:c:lusers} $	
Allow IP Camera Up	ograde Tool to d	communicate on these networks:	
🗹 Private netw	vorks, such as n	ny home or work network	
Public network Decause the	rks, such as thi se networks off	ose in airports and coffee shops (not recommended ien have little or no security)	
What are the risks	of allowing an a	pp through a firewall?	
		Allow access Cancel	

4. DHCP

Although some IP camera manufacturers support DHCP addressing, it is highly recommended to assign a static IP address to the installed IP cameras to keep unexpected network events from changing the IP address of the camera. If the camera's IP address changes, the Ganz CORTROL Recording Server cannot receive or record video from that camera until a user manually reassigns the camera's IP address or changes the address setting on the CORTROL server to match the camera's new address.

Ganz IP cameras ship by default with DHCP addressing enabled, but are discovered by their MAC address through their discovery tool.





5. PixelPro Multi Upgrade Tool

Ganz provides the installation Multi Upgrade Tool to find PixelPro IP cameras.

The utility is provided on the CD included with the cameras, and/or as a direct download from GanzSecurity.com.

Run the Multi Upgrade Tool to display the following window:

бтер	MAC Address	Type	IP Address	HTTP Port	Model	SW Ver.	DNN Sensitivity
EADY	00:11:56:08:74:96	DHCP	192.168.137.77	80	ZN-DT2MTP-IR	ZN3C0.2.1576.32	Not Supported
IIC Select : (IP informatio	Any IPv4	77	< SEARCH >	•	Sort by : Model		Exec
JIC Select : (IP informatio 9 Address: ubnet Mask: ateway:	Any IPv4 1> 192 . 168 . 137 . 255 . 255 . 255 . 192 . 168 . 137 .	77 0 10	< SEARCH > ID ADMIN Password **** Search every 60	seconds	Sort by : Model <upgrade></upgrade> File Open 	Upgrade All	Exec
JIC Select : «IP informatio > Address: ubnet Mask: ateway: NS1:	Any JPv4 19- 192 . 168 . 137 . 255 . 255 . 255 . 192 . 168 . 137 . 192 . 168 . 137 .	77 0 10	- < SEARCH > ID ADMIN Password ***** Gearch every 60 G system Info Log T UP Search	seconds	Sort by : Model CUPGRADE> File Open F/W version: U	Upgrade All	STOP
VIC Select : <ip informatio<br="">> Address: ubnet Mask: ateway: NS1: NS2: etwork Type</ip>	Any IPv4 192 . 168 . 137 . 255 . 255 . 255 . 192 . 168 . 137 . 192 . 168 . 137 . 0 . 0 . 0 . DHCP ▼ HTTP Port	77 0 10 10 80	< SEARCH > ID ADMIN Password ***** Search every 60 Gystem Jnho Log TCP Search 192, 168, 10 192, 168	• seconds	Sort by : Model <upgrade> File Open F/W version: U Prohibit S/W Dov Scheduled Upgra 5 Viniti</upgrade>	Upgrade All	Exec

Click Search to search for Ganz PixelPro IP cameras on the local network. If the program does not detect any cameras, select TCP Search, and enter an IP range. If no cameras are found, please verify that the cameras are connected to the local network, and powered on.

Once all of the Ganz PixelPro IP cameras on the local subnet are listed, highlight a camera to display its IP Information.

To change the IP address of the selected camera, select Static in the Network Type area. Enter the IP address, Subnet Mask, Gateway, and DNS1 (if known), DNS 2, then click *Change IP address*.

NOTE: The factory default login for Ganz PixelPro cameras is:

- Username: ADMIN
- Password: 1234

The username and password will be needed when adding these cameras to the Ganz CORTROL System.





6. PixelPro GXi IPAdminTool

Ganz provides the installation IPAdminTool to find PixelPro GXi IP cameras.

Run the IP Admin Tool to display the following window:

IPAdminTool V3.23.27							- 🗆 X
IP Setup Update	Reboot	Device Info Accor	unt Refresh		Device count : 1		Exit
Filter	IP r	ange :		Apply			Show snapshot
▼ Product Name	Rack Info	IP Address	MAC Address	USN	Friendly Name	Firmware	Uptime
ZN1-D4NMZ43L		192.168.137.155	00:1C:B8:C0:26:14	E60C02614	ZN1-D4NMZ43L	1.11.0.7	00,02:06

Click Refresh to search for Ganz PixelPro GXi IP cameras on the local network. If the program does not detect any cameras, select Filter, input an IP range, and click Apply. If no cameras are found, please verify that the cameras are connected to the local network, and powered on.

Once all of the Ganz PixelPro GXi IP cameras on the local subnet are listed, highlight a camera to change its IP Information. Select IP Setup to change the IP information. Select Static, then enter the IP address, Subnet Mask, Gateway, DNS, and click Apply.

🐌 Single IP Change		X
Current Information		
@ DHCP	C Static	
IP Address	192 . 168 . 137 . 155	
Subnet Mask	255 . 255 . 255 . 0	
GateWay	192 . 168 . 137 . 10	
DNS	192 . 168 . 137 . 10	
New Information		
@ DHCP	C Static	
IP Address	192 . 168 . 137 . 155	
Subnet Mask	255 . 255 . 255 . 0	
GateWay	192 . 168 . 137 . 10	
DNS	192 . 168 . 137 . 10	
🔽 Use default I	D/PW	
ID	root	
PW	N1418391	
		Apply Close
		Hepery Close

NOTE: The factory default login for Ganz PixelPro GXi cameras is:

- Username: root
- Password: pass

The username and password will be needed when adding these cameras to the Ganz CORTROL System.



CBC AMERICAS Corp.



7. **GENSTAR IPSearchTool**

Ganz provides the installation IPSearchTool to find GENSTAR IP cameras.

Run the IP Search Tool to display the following window:

🔒 G.	ANZ-ZN8_IPS	earchTool-)	/2.6			- 0
Mat	Rart (ActiveSee Sto	roh D			C Brice B. (7702) C Brice B. (7702) C Brice user the following IP address Brice B2: (10:107.109)
80	Device ID	Port	IP	ProductModel	Software Version	Subnet Mask: 255.255.0
1	OTAFEB	30001	192. 168. 137. 199	ZNS-F7NTFN10L	√2. 0. 0701. 1002. 129. 1. 105. 3	Befault Gateway: 192.168.137.10
						DMS Preferred DMS Server: Atternate DMS Server: [192.168.0.2
						User Hame: AINTIN
						Password: Modify
۹ Cle	er All					

Click Start to search for Ganz GENSTAR IP cameras on the local network. If the program does not detect any cameras, select the *ActiveSearch* tab, input an IP range, click *Add*, then click *Start*. If no cameras are found, please verify that the cameras are connected to the local network, and powered on.

BeginIP 192.168.137.1 Port 30001	EndIF 192	Delete Clear		
BeginIP 192.168.137.1	EndIP 192.168.137.255	Port 30001		Device ID: [^{0]} ACLES C Device obtain an IP address automatically C Device user the following IP address [192.168.137.199
Device ID Fort	192:165:137.199	Productiodal. 230-97/817/8101	56(twee Version 1/2 (0.000) (0.00 (1.50 (1.00 3	Unter National Market Schwarz (1922)

Once all of the Ganz GENSTAR IP cameras on the local subnet are listed, highlight a camera to change its IP Information. Modify the IP address, Subnet Mask, Gateway, and DNS to the right, then click Modify.

NOTE: The factory default login for Ganz GENSTAR IP cameras is:

- Username: ADMIN
- Password: 1234

The username and password will be needed when adding these cameras to the Ganz CORTROL System.



CBC AMERICAS Corp.





6. CORTROL Download

Go to GanzSecurity.com > Support > Resource Center > Software.

- Prior to downloading CORTROL, confirm the bit version of Windows on your PC, 32-Bit vs. 64-Bit.
- To confirm your Windows bit version, go to Control Panel > System and confirm System type as 32-Bit or 64-Bit.
- Select and download either CORTROL Prime/Premier 32bit or 64bit, depending on the Windows OS bit version.
- Note: For most browsers, any downloaded files can be found in the Windows Download folder.

	and the state	- o ×	🔜 System			
File Edit View Emonites Tools Help			🗧 🔶 👻 🛧 🔜 > Control Par	nel > System and Security > Sys	stem	
COWNLOAD A GANZ CORTROL GLOBAL 32BIT (CURRENT 1.0) Network Video Recording Software	Other Resources Quick Guides	^	Control Panel Home	View basic information	about your computer	
DOWNLOAD	Specifications Tools & Calculators		Device Manager	Windows edition		
DOWNLOAD	DOCUMENTS BY PRODUCT		System protection	Windows 10 Home © 2015 Microsoft Corporati	ion. All rights reserved.	
DOWNLOAD	All Product Categories Accessories & Kits		Advanced system settings	System		
DOWNLOAD Previous Versions GANZ 2145-NVR CODEC (CURRENT 2.5.4) Network Video Recording Software	Cameras Lenses			Processor:	Intel(R) Core(TM) i5 CPU	650 @ 3.20GHz 3.20 GHz
DOWNLOAD Produce Versions GANZ ZNS-NVR SHAREWARE (CURRENT 2.5.4) Network Video Recording Software	Monitors Recording Devices			Installed memory (RAM): System type:	8.00 GB (7.86 GB usable) 64-bit Operating System, x64	4-based processor
DOWNLOAD GANZVISION CLIENT (CURRENT 5.10.4)				Pen and Touch:	No Pen or Touch Input is ava	ailable for this Display
Tenshas Version OOWNLOAD GANZVISION SOFTWARE SUITE (CURRENT 6.8.4.10879) Tenshas Version				Computer name, domain, and Computer name:	Workgroup settings DESKTOP-91CP4AI	
DOWNLOAD GANZVISION SOFTWARE SUITE 64 BIT				Full computer name: Computer description:	DESKTOP-91CP4AI	
DOWNLOAD GANZVISION WEB SERVICE (CURRENT 3.2.5)				Workgroup:	WORKGROUP	
(DOWNLOAD) GXI ADMIN TOOL (CURRENT 3.23.0.7) Presika Vienize				Windows activation Windows is activated Read	d the Microsoft Software Licer	nse Terms
DOWNICAD IP INSTALLATION WZARD SOFTWARE ZN-PT304/ZN-D2024/ZN-YH305/ZV-5306		v		Product ID: 00000-00000-00	0000-00000	







1. Install & Activation

Run the Ganz CORTROL Server installer that was recently downloaded.

- Select the needed language, and click *Next*.
- Accept the terms of agreement, and click Next.
- Accept default installation location, and click Next. (Change location destination if required.)

🚨 Ganz CORTROL Setup Wizard 📃 🗖 🗙	🖸 Ganz CORTROL Setup Wizard 📃 🗖 💌
Welcome to Ganz CORTROL Setup Wizard!	Step 1 of 3. Licence agreement
Game CORTROL Setup Wizard The viscant will guide you through installing Game CORTROL Server 1.0.0 on your computer. It is recommended that you dose all other applications before continuing. Image: Step 1.0 Learnes agreement is order to continue Image: Step 2.0 Destination location Select and confirm the folder where you want the Galec CORTROL software to be installed Image: Step 3.0 Select components for installation Step 3.0 Select to components for installation Select the Language to use during the installation process Image: Step 1.0 Learnes agreement is a select to process	Ganz CORTROL Licence Agreement Please read the following Licence agreement. You must accept the terms of this agreement before you can continue with the installation. MiPORTANT — READ CAREFULLY. This is a legal agreement between YOU (an individual or inging entity ('you'(f)' and CBC AMERICA'S Cony, 'CBC AMERICA'S) pertaining is the ConTrol® CMS Software by our advolute install, copy, access or otherwise use, including and yoourentiation which may be provided herewith isingularly and collectively, the "Software"), 'CBC AMERICA'S icontes the Software by our advolute install, copy, access or otherwise use, including and yoourentiation which may be provided herewith isingularly and collectively, the "Software"), 'CBC AMERICA'S icontes the Software by our day on the express condition that you accept and you carefully read the following terms and contained before using the Software, by our advolute integration monthing, copying, accesses or otherwise using the Software, by our advolute, installing, copying, accesses ing or otherwise using the Software, by our advolute terms, then CBC AMERICA'S is unwilling by license the Software by you and preve these terms, then CBC AMERICA'S is unwilling by license the Software by our advolute the terms of the agreement and conductions and used to initial, copy, access, or otherwise use the Software, and 'v accept the terms of the agreement
Next Cancel	Previous Next Cancel

Specify which components to install.

- Leave all components selected for this installation.
- Select the needed language, and click Next.
- Once installation is complete, click *Finish*.

The Server Setup Wizard will pop up with options for the Server's title, and port.

- Server name: default is "Server" (change as required).
- Server port: default is 60554 (change as required).
- Click on *OK*, then click on *OK* again to proceed to the Activation Wizard.

CORTROL offers several ways to activate a license.

- Activate existing license key
- Offline activation via license file
- Request free CORTROL Prime license key
- Request an evaluation license key





2. Activate Existing License Key

If a license key has been received by email, select *Activate existing license key*, then copy and paste the key into the dialog box. Select *Activate* in order to register the key.

iz CORTROL activation 💶 🗖 💌	Ganz CORTROL activation -
p 1. Select activation type	Step 2. Activate existing licence key
Activation types:	License key
Activate existing licence key You should have a valid licence key from your senice provider Omine activation via licence file You should have a valid licence file provided by Ganz CORTROL Support Nequest free CORTROL Prime licence key Fill act request free CORTROL Prime licence key Generate an evaluation licence key	Enter the licence key X000000000000000000000000000000000000
OK Exit	Activate Ca

3. Offline Activation

If there is no Internet connection for security reasons and/or server disposition particularities, choose *Offline Activation*. The Offline Activation selection consists of three steps:

- Generate the activation file on the target server.
- Go to the online activation system at http://ganzsecurity.com/cortrol and fill in the form.
- Apply the provided license file to the system.

Select license activation type Offline activation via license file, and click OK.

Click *Generate* to create the activation file (the default file name of which is *system.bin*) and save the activation file. Note: It is recommended not to change the file name.

cation types: chuate existing licence key huad have a valid konce key from your service provider filme activation via licence file have a valid exerce file provided by Ganz CORTROL Support expuest free CORTROL Prime licence key trequest free CORTROL Prime licence key			
ctivate existing licence key hould have a valid Licence key filme activation via licence file hould have a valid licence file power of the star COITROL Support exposet firee CORTROL Prime licence key trequest firee CORTROL Prime licence key	Activation types:		
haudi have a valid former, kny from your service provider fillere activation via licence file Mile A vera a valid licence file provided by Granz CORTROL Support Request free CORTROL Prime licence kny t request free CORTROL Prime licence limited to 16 cameras	Artivate eviction licence key		
ffline activation via licence file head have a valid licence file provided by Ganz CORTROL Support equest free CORTROL Prime licence key request from and get free CORTROL Prime licence limited to 16 cameras	You should have a valid licence key from your service provider		
hould have a valid licence file provided by Ganz CORTROL Support equest free CORTROL Prime licence law I request frem and get free CORTROL Prime licence limited to 16 cameras	Offline activation via licence file		
equest free CORTROL Prime licence key request form and get free CORTROL Prime licence limited to 16 cameras	You should have a valid licence file provided by Ganz CORTROL Support		
it request form and get free CORTROL Prime licence limited to 16 cameras	Request free CORTROL Prime licence key		
and a substitution from the	Fill out request form and get free CORTROL Prime licence limited to 16 cameras		
equest an evaluation licence key	Request an evaluation licence key		
ate an evaluation licence key via Ganz CORTROL web interface	Generate an evaluation licence key via Ganz CORTROL web interface		
equest an evaluation licence key ate an evaluation licence key via Ganz CORTROL web interface) Request free CORTROL Prime licence key I out request form and get free CORTROL Prime licence limited to 16 cameras >) Request an evaluation licence key mente an evaluation licence key via Garu CORTROL web interface		







Copy the binary file to any computer that has Internet access, and go to the online form at <u>http://ganzsecurity.com/cortrol</u>. Fill in the required fields of the online form, and upload the file. The activation system will process the file and allow the download of the license file. This license file will be unique and will only be valid on the same machine from which the original *system.bin* file was generated on.

Software Activation	Inquiry Form
Provided form is generating license activation file necessary for offline installations. Please follow instructions below.	Information for Rese
You need both license key (not necessary for free or demo actiovation) and the offline advation file created by Luxrist Activation Witard. Upon successful advation, you should receive "license add" file. Once file is received, please load it in Luxrist Activation Witard and finalize your activation wizard.	
SOFTWARE ACTIVATION FORM	
License key	
Key provided with software after purchase	
Select offline activation file to upload	

Next, copy the license file to the original computer, then from the activation wizard, click *Browse* to locate it and open the *license.dat* file provided by the activation system. The validated license.dat file will then be loaded, allowing the registration process to be finished.

Sanz CORTROL activation	🛛	Open	
ep 2. Activate existing licence	⊛ € ۲	↑ 🎥 > This PC > Desktop 🗸 🗸	C Search Desktop
	Organise 🔻	New folder	III • 🚺
Licence file System activation file Generate. File in the activation from online - upload the file generated and get a signed locace Specify locace file Browse. Locale the signed locace file to finish activation	★ Favourit ■ Celato © Advym Recent This PC Wetwork	es No items m 19 loads acfolder t places	utch your search.
		File name: license.dat	✓ License data file (*.dat)

Click *Activate* to apply the license file. If the license is valid, an activation success confirmation will be seen with the following details:

- Product type
- License key
- License key expiration date (if applicable)
- Support subscription expiration date
- Allowed channel amount

The license information will be stored on the server. A snapshot of this screen can be saved for future reference, so that this information will still be accessible in case of server OS or hardware failure.

Finally, click *Done* to exit the activation wizard, or click *Start Quick Setup Wizard* to proceed with server configuration.



CBC AMERICAS Corp.



4. Request Free CORTROL Prime License Key

Use the following steps to active the CORTROL software with a free Prime license key:

- Select Request free CORTROL Prime license key.
- Click on *OK* to continue.



To Complete the request for a free CORTROL Prime license key:

- Fill in the required information: your first name, last name, and email address.
- Optionally, you may fill in the phone, country of origin, city, field of application, and company name fields.
- If interested, click on Subscribe to Ganz CORTROL newsletter.
- To finish, click Activate.
- Once activation is completed, click on Start Quick Setup Wizard.

	Please fill up and submit request form		Thank you for activating your licence! CORTROL Prime
First name		8	License details: Key: DADADA2-DAI4-4349-DACD-A4DADADAIDA Channels supported: up to 16
Last name		⊗	
Email address		8	
Phone			
Country	United States × City		
Field of application	Corporate v Company name		





5. Evaluation License

If wishing to evaluate the Ganz CORTROL product or need to assess server performance over a specific period of time, a 60-day evaluation license key can be requested from <u>CBC AMERICAS, Corp</u>.

Fill out the Ganz CORTROL Prime 60-Day Demo form, and click *Submit*. Typically, within one business day or less, the 60-Day Demo license will be emailed.

Ganz CORTROL Prime 60-Day Demo	
CORTROL	
Please fill out the form below to receive a free license key for a 60-Day Demo	
System requirements: Microsoft Windows operating system (7 SP1, 8, 8.1, 10, Server 2008 R2, Server 2012 R2)	
First Name*	
Last Name*	
Email *	
Company *	
Phone*	
City*	
State/Province (U.S./Canada) *	
Select	\sim
Country*	
[perect	⊻
Industry - Select	
lam*	
Select	~
When are you planning to purchase?*	
Select	~
Would you like us to contact you for a full demonstration?	
Select	\sim



Once you have received the 60-Day Demo license key, apply it during the initial CORTROL Prime installation process.

During the initial install, select *Activate existing license key*, and copy & paste the key you were emailed into the license key field. After you have done so, activate your trial key by clicking on *Activate*, and enjoy your 60-Day Demo of Ganz CORTROL Premier.

	License key
Enter the licence key	00000000-0000-0000-00000000000000000000
	Ine licence key can be tround in the email received from Ganz CORTROL sales. Alternatively, and yours unveillance service provider.







6. Quick Setup Wizard

The CORTROL Console Setup Wizard will help easily configure the Ganz CORTROL Console step by step.

- The login screen will autofill with the default server address, user name, and password.
- Select *OK* as there is no password by default.
- A warning of "You have to change your password" will appear. Select OK to acknowledge this.

localhost	
P address or host name of the server	
Username	A Warning
admin	
Jsername	
Password	Warning
	You have to change your password.
Password	

On the next screen, enter a new password.

- Check *New Password*, and enter a new password.
- Confirm the new password by retyping it in the second input.
- Select *OK*, and continue.

Launch the device and channel auto discovery wizard.

• Click on the Launch Step 1. Devices and channels option to auto discover any network cameras and or devices.

Luser admin*	×	Ganz CORTROL Console Setup Wizard
User	Details	Welcome to Setup Wizard
Petails	User login name admin Account name to log into the system. Case-sensitive User's full name Built-In Administrator account triset user's first name and fast name Email address Email address Email address Mew password New password Pasnword to log into the server ■e=== Resider password PIZ priority	Welcome to Setup Wizard. Ganz CORTROL Console Setup Wizard Setup Wizard helps you to easily configure Ganz CORTROL Console. Just follow the wizard's step-by-step process. Free Full HD Setup Wizard steps: Step 1. Devices and channels Search for devices, apply recording settings to channels and set up security groups Please attach and activate all IP cameras and press below button. Launch Step 1. Devices and channels
	S v PTZ priority	
	OK Cancel	Launch VMS Client Exit





Network Scan Parameters:

- The network scanner will list any and all network adapters available on the host pc/server.
 - Scan by adapter address range, an entered IP Range, or scanning attached devices.
- Confirm the network to scan, and select OK.
- The device and channels discovery wizard will launch and run.
- Confirm any found devices by selection, and modify *Device properties* as needed.
 Device name, model, host/IP address, port, username, and password
- Select the cameras to add, by way of placing a check mark next to them.
- Select Add selected devices and channels.
- Confirm the choices by selecting Yes.
- For now, skip the launch of the Ganz CORTROL Client Application.
- Select *Done* to close out of the wizard.

S X	Device autodiscovery					- • ×		
	Device autodiscovery	Found devices						
Scan parameters	Found devices							
Scan network adapter address range	🔀 Found channels	Start device search Scanning has been	succe	sstully completed, 3 new device(s) discovered.				
Scans one or more network adapters and attached devices		Device properties	F	ound devices		Q		
ADAPTER IP ADDRESS MASK			^ V	DEVICE NAME	MODEL	HOST		
✓ NETGEAR WNDA3100v2 N600 Wi 10.49.86.211 255.255.255.0		Device name		Generic) ONVIF Compatible on 192.168.137	. (Generic) ONVIF Compatible	192.168.137		
Intel(R) 82578DC Gigabit Network 192.168.137.5 255.255.255.0		(Generic) ONVIF Compatible on 192.168.	¥	Corel Camera Plug-in on localhost	(Generic) DirectShow Device			
Microsoft Hosted Network Virtual 0.0.0.0 0.0.0.0		Model	×	CorelScreenCapture on localhost	(Generic) DirectShow Device			
		(Generic) ONVIF Compatit Change						
Scan IP address range		Device model						
Scans specified address range and attached devices		Host						
Scan attached devicer		192.168.137.155						
Scans attached devices		Host name or IP address						
De te		Port						
Ports		80						
80		Port number						
.omma separated list of port numbers		Username						
'asswords		admin						
admin,admin		Parquard						
		admin						
		Password to access the device	~					
Jsernames and passwords (one combination per line). Usernames and passwords separated by a		Apply Reset	<			>		
Reset OK Cancel				Add se	lected devices and channels	Cancel		







7. CORTROL Configuration

The options to configure Servers, External services, and Users will be skipped for the moment, as CORTROL resources are dependent on having its Devices and Channels configured first.

The traditional idea of cameras as surveillance software entities has been developed, resulting in the concepts of devices and channels. Essentially, it represents the separation of physical and data layers for reasons of security and easier management.

1. Devices

"Devices" refers to any piece of physical equipment that serves as a data provider. Any piece of hardware delivering video, audio and event streams to the server falls into this category. IP cameras, video encoders, capture boards, USB web cameras – these are all examples of devices that can be added to CBC AMERICAS, Corp. software. Devices do not include any data streams.

From Ganz CORTROL Management Console, select Devices.

Buttons on the upper panel give the option to create, edit and remove device resources.

🗉 Ganz CORTROL Management Console - localhost 🛛 🗖 💌						
	n > Devices		admin	÷	C Search	২ ≡
Configuration	➡ New device ▼	Edit Assign group View d	thannels 🔟	x	1 selected	
Servers	TITLE	DEVICES/MODEL	HOST/IP PO	ORT	HARDWARE ID	
SExternal services	■ Fisheye	(Generic) ONVIF Compatible	192.168.137.60	80		
L Users	■4 iPhone	(Generics) External Source		0	IMEI:D282D0F5-44E9-4823-87F0-FE1FAEB6794C	
	■ XX-MD1-1080P-IR	CBC (Ganz) PixelPro Series	192.168.100.10	80		
	■ ZN8-B4NVF56	CBC (Ganz) GANZ GenStar Series	192.168.137.20	80		
24 Channels	ZN8-M4NTFN4L	CBC (Ganz) GANZ GenStar Series	192.168.137.242	80		
Recording	ZN8-N4NFN4	CBC (Ganz) GANZ GenStar Series	192.168.137.151	80		
Maps	ZN-DNT352XE-MIR	CBC (Ganz) PixelPro GXi ZN-xXE Series	192.168.100.17	80		
🖵 Layout templates	🗖 Genstar			0		
	🖬 Outdoor Cameras			0		
Visual groups	-					
🔛 Configuration						
🗲 Events & Actions						
🐺 Monitoring						
🗐 Audit	Recently added, 0	Recently updated, 0 Groups, 2	2 Devices, 7			

Devices menu options

Functions		Options				
New Devices	New device	Enter new device: Details, Membership, Permissions, Network, Channels				
	New device group	Enter new device group: Details, Members, Membership, Permissions				
	Find devices	Launches device auto discovery wizard				
Edit		Edits select device: Details, Membership, Permissions, Network, Channels				
Assign Grou	ıp	Assignment of selected devices to an existing group				
View Channels		Switches view to Channels menu				
Trash Can		Deletes any selected devices				
Selected		Indicates number of selected devices. Releases devices when selected				



EAST COAST +1 (919) 230-8700 | WEST COAST +1 (310) 222-8600 | MEXICO +52 (55) 5280 4660 Ganzsecurity.com ©2016 CBC AMERICAS Corp. All Rights Reserved

CBC AMERICAS Corp.



New Device

Devices offer three options for adding devices:

- New device: Manual entry on a per device basis
- New device group: A device group, where already existing devices are grouped together (e.g., "Outdoor Cameras")
- Find devices: Launches the device auto discovery wizard discussed earlier.

To manually add a new device, start by selecting New device.

Ganz CORTROL Management Cortes and Control	nsole - localhost				- 🗆 ×
	> Devices		admir	• 🕹	C Search Q =
Configuration	➡ New device ▼	Edit Assign group View	channels 🔟	×	1 selected
Servers Servers	TITLE	DEVICES/MODEL	HOST/IP P	ORT	HARDWARE ID
😂 External services	Fisheye	(Generic) ONVIF Compatible	192.168.137.60	80	
💄 Users	■ iPhone	(Generics) External Source		0 11	MEI:D282D0F5-44E9-4823-87F0-FE1FAEB6794C
Devices	■ XX-MD1-1080P-IR	CBC (Ganz) PixelPro Series	192.168.100.10	80	
	ZN8-B4NVF56	CBC (Ganz) GANZ GenStar Series	192.168.137.20	80	
🔀 Channels	CN8-M4NTFN4L	CBC (Ganz) GANZ GenStar Series	192.168.137.242	80	
Recording	ZN8-N4NFN4	CBC (Ganz) GANZ GenStar Series	192.168.137.151	80	
🚱 Maps	ZN-DNT352XE-MIR	CBC (Ganz) PixelPro GXi ZN-xXE Series	192.168.100.17	80	
🔜 Layout templates	🖬 Genstar			0	
	Outdoor Cameras			Ũ	
• Visual groups					
🔛 Configuration					
🗲 Events & Actions					
🐺 Monitoring					
🛄 Audit	Recently added, 0	Recently updated, 0 Groups,	2 Devices, 7		

Details

Details offers the option of a "Title" and "Model" selection for the device.

- Place the name of the device as how you would like it to appear during use in the "Title" blank. The example below shows the model of the camera "ZN-DT2MTP-IR" as the title.
- To enter the model, select *Change* and begin typing the manufacturer name.
- In this case, enter "CBC," which corresponds to the "Vendor," and select "PixelPro Series" for the camera.
- Note the appearance of *Network* and *Channels* now in the Device window.

■ Device ZN-DT2MTP-IR*		x
Device	Details	
🖋 Details	Title	
🗛 Membership	ZN-DT2MTP-IR	
🛉 Permissions	Device name	
🍪 Network	Model CBC (Ganz) PixelPro Series Change	
🔀 Channels	Model	
	OK Cancel]





Membership

This describes the adding of the camera to a grouping of cameras, or "Membership." The example used is "Outdoor Cameras."

- All outdoor cameras are grouped together, forming a membership for convenience and ease of administration.
- Choose a group from the *Available groups* section, and click on *Add* to add the device to the group.
- To remove the device from the group, choose the group from *Selected groups*, and click on *Remove*.
- A device may be linked with several groups, as devices may have multiple roles in a surveillance system.

■ Device ZN-DT2MTP-IR						- 🗆 ×
Device	Membership					Q
🖋 Details	Selected groups			Available groups		
👫 Membership	TITLE	ID	TYPE	TITLE	ID	TYPE
🕂 Permissions	🖬 Outdoor Cameras	(109) De	vice group			
🗳 Network						
🔀 Channels	Remove			Add		
					OK	Cancel

Permissions

Device permissions allow assigning the accessibility of the device to a user, users, or user groups.

- Choose a user or user group from the Available users section.
- Under Permissions, click on permissions to be assigned. (Examples: Administration, Navigation, and Search)
- To remove the permissions, select the user or user group under *Selected users*, and click on *Clear*.
- A device may belong to several groups at once, as devices may have multiple roles in a surveillance system.
- Devices with an empty permission list will not be available to anyone except for the root (global) administrator.

■ Device ZN-DT2MTP-IR*							- 🗆 X
Device	Permissions						Q
🖋 Details	Selected users				Available users		
🗛 Membership	TITLE	ID	TYPE	PERMISSIONS	TITLE	ID	TYPE
🛉 Permissions	💄 Brian	(10	User	Administer	👪 Guards	(104)	User group
Network					👪 Managers	(105)	User group
🔀 Channels				Clear			
					OK		Cancel





<u>Network</u>

In order for CORTROL to access a device, CORTROL requires the Host IP address, communications port, and login credentials for the device. Before filling in the details, make sure the settings match those on the camera. If the device has not been connected yet, ensure that the same settings are applied during camera installation.

Enter the network settings for device access;

- Host: IP or URL of the device
- Port: Communications port of the device
- Username: ID required to access the interface and settings of the camera
- Password: Password required to access the interface and settings of the camera
- Open device in browser: Opens the default OS browser to the device's browser interface
- Ping device: Confirms communications between the CORTROL Server and the IP device

Device ZN-DT2MTP-IR*	X
Device	Network
🖋 Details	Host
🗛 Membership	192.168.137.77
🛉 Permissions	Host name or IP address
😵 Network	Port R0
🛠 Channels	Port number
	Username
	ADMIN
	Open device in browser Ping device
	OK Cancel

Channels

Channels refer directly to the video stream of the device in question, and are automatically attached when a device is added.

- Detach: The option allows a channel(s) assigned to a device to be detached.
- Attach: The option allows a channel(s) not assigned to a device to be attached.
- Reset: This button can be clicked to undo any changes made to the channels.

Note: Reset only works for current editing session. Reset will not be available after saving any changes and reopening the dialog box.

■ Device ZN-DT2MTP-IR*	- C X
Device	Channels
🌶 Details	Channels Detach Attach Reset
Membership	TITLE
🛉 Permissions	1 🔀 ZN-DT2MTP-IR
Network	
🔀 Channels	
	OK Cancel





2. New Device Group

A device group represents a grouping of similar intent based devices. An example would be grouping all our outdoor cameras together.

Grouping together devices with similar intent or application allows for quick administration.

Manually adding a new device group:

While in the *Devices* configuration window, click the down arrow to the right of the *New device* button to reveal a dropdown list, then select *New device group*.

Ganz CORTROL Management Co	nsole - localhost				_ =	x
	n > Devices		adn	nin 👤	C Search Q	≡
Configuration	➡ New device ▼	Edit Assign group	View channels	×	1 selected	
Servers Servers	TITLE	DEVICES/MODEL	HOST/IP	PORT	HARDWARE ID	
SExternal services	■ Fisheye	(Generic) ONVIF Compatible	192.168.137.60	80		
よ Users	iPhone	(Generics) External Source		0	IMEI:D282D0F5-44E9-4823-87F0-FE1FAEB6794C	
Devices	■ XX-MD1-1080P-IR	CBC (Ganz) PixelPro Series	192.168.100.10	80		
	ZN8-B4NVF56	CBC (Ganz) GANZ GenStar Ser	ies 192.168.137.20	80		
🔀 Channels	ZN8-M4NTFN4L	CBC (Ganz) GANZ GenStar Ser	ies 192.168.137.242	80		
Recording	ZN8-N4NFN4	CBC (Ganz) GANZ GenStar Ser	ies 192.168.137.151	80		
🚱 Maps	ZN-DNT352XE-MIR	CBC (Ganz) PixelPro GXi ZN-xX	E Series 192.168.100.17	80		
- Lavout templates	🖬 Genstar			0		
	🗖 Outdoor Cameras			0		
Visual groups	-					
🖽 Configuration						
🗲 Events & Actions						
🏧 Monitoring						
🛄 Audit	Recently added, 0	Recently updated, 0	Groups, 2 Devices, 7			

<u>Details</u>

Details offers the option of a "Title" and "Model" selection for the device group.

• Place the name of the device group as how you would like it to appear during use in the "Title" blank. The example below has chosen "Outdoor Cameras" for the group name.

Device group Outdoor Camera	s – – 🗙
Device group	Details
🖋 Details	Title
🍟 Members	Outdoor Cameras
🚑 Membership	Group name
📫 Permissions	
	OK Cancel



24 | Page



<u>Members</u>

This describes the adding of a device or devices to a device grouping.

- In the example below, all outdoor cameras can be considered as potential members for the device group, "Outdoor Cameras."
- Choose a device from the *Available members* section, and click on *Add* to add the device to the members group.
- To remove member from the device group, choose the member from *Selected members* and click on *Remove*.

Device group Outdoor C	Cameras					- 🗆 🗙
Device group	Members					Q
🖋 Details	Selected members			Available memebers		
🍟 Members	TITLE	ID	ТҮРЕ	TITLE	ID	TYPE
🚑 Membership	CN1-D4NMZ43L	(102) Device				
🖷 Permissions	CN-DT2MTP-IR	(107) Device				
	Remove			Add		
					ОК	Cancel

<u>Membership</u>

This describes the adding of the device group to a grouping, or "Membership," of additional groups. The example used is "Outdoor Cameras," and is related to CORTROL Global usage.

- The example device group "Outdoor Cameras" could include the additional group called "Outdoor West Parking Lot."
- Choose a group from the *Available groups* section, and click on *Add* to add the group.
- To remove the group from the *Selected groups* column, select the group, and click on *Remove*.
- A device group may be linked to several groups, as device groups may have multiple roles in a surveillance system.

Device group Outdoor Camera	S					- 🗆 🗙
Device group	Membership					۹
🖉 Details	Selected groups			Available groups		
🍟 Members	TITLE	ID	TYPE	TITLE	ID	ТҮРЕ
🚑 Membership						
📫 Permissions						
	Remove			Add		
					OK	Cancel





Permissions

Device group permissions allow assigning the accessibility of the device group to a user, users, or user groups.

- Choose a user or user group from the *Available users* section
- Under *Permissions*, click on permissions to be assigned. (Examples: Administration, Navigation, and Search)
- To remove the permissions, select the user or user group under *Selected users*, and click on *Clear*.
- A device may belong to several groups at once, as devices may have multiple roles in a surveillance system.
- Devices with an empty permission list will not be available to anyone except for the root (global) administrator.

🗖 Device group Outdoor C	Cameras						- 🗆 X
Device group	Permissions						Q
🖋 Details	Selected users				Available users		
Members	TITLE	ID	TYPE	PERMISSIONS	TITLE	ID	TYPE
🗛 Membership	👪 Managers	(10	User group	Administer	👪 Guards	(104)	User group
🛉 Permissions					💄 Brian	(106)	User
				Clear			
					OK		Cancel





3. Channel

"Channel" refers to any actual video stream (with corresponding audio/event stream, if applicable) delivered to the server from any of the configured devices. The software's licensing mechanism counts channels and not devices.

In CORTROL, devices hold camera TCP/IP and user settings, as well as actual hardware model. By contrast, channels do not possess these properties; this allows them to be handled as virtual entities, detaching and re-attaching them to/from devices. Channels feature video stream configuration settings: resolution, frame rate, bit rate and others. Channels also allow for configuration of supplementary data streams, audio, motion, digital input/output events, PTZ control, and camera-side analytics information.

As there are also some multichannel devices (e.g., capture boards and video encoders), each device can have one or more channels attached to it. These can either be assigned or detected automatically; the maximum number of channels for each specific device is stipulated by the device model. Devices only appear within Ganz CORTROL Console, allowing the admin to apply all necessary configurations.

From Ganz CORTROL Management Console, select *Channels*.

Buttons on the upper panel give the option to create, edit and remove channel resources.

Ganz CORTROL Management C	onsole - localhost –	□ ×
Configuratio	n > Channels Buit-in Administrator account 💄 C Search	৹
Configuration	Create channel group Edit Assign main stream recording configuration Assign group Disable	
Networks *	X 1 selected TITLE ID DEVICE IP PORT_ENABLED	
Servers	XC 3MP PTZ (115) 3MP PTZ (114) 192.168.137.97 80 enabled	
Failover clusters *	X ZN8-F7NTFN10L (119) ZN8-F7NTFN10L (118) 192.168.137.199 80 enabled	
L Users	X ZN-86DMP55HE (117) ZN-86DMP55HE (116) 192.168.137.112 80 enabled X ZN-DT2MTP-IR (108) ZN-DT2MTP-IR (107) 192.168.137.77 80 enabled	
Devices		
🔀 Channels		
🔛 Configuration		
🗲 Events & Actions		
💯 Monitoring		
🛄 Audit	Recently added, 3 Recently updated, 0 Groups, 0 Channels, 4 Detached, 0 Enabled, 4 Disabled, 0	

Channels menu options

Functions		Options		
Create channel group		Create group: Details, Members, Membership, Permissions		
Edit		Edit selected channel: Details, Motion Detector, Membership, Permissions, Ch Config.		
Recording	Assign main stream	Assignment of recording configuration to main stream of device		
configuration	Assign substream	Assignment of recording configuration to sub stream of device		
Assign group		Assignment of selected channels to a channel group		
Disable		Disables selected channel or channels		
Selected		Indicates number of selected channels. Releases channels when selected		

Note: A channel's resource cannot be deleted if it is currently in use, i.e., when a channel is assigned to a device.





4. Create Channel Group

A channel group represents a grouping of similar intent based channels (e.g., grouping outdoor channels together). Grouping together channels with similar intent or application, allows for quick administration.

Manually adding a channel group:

Select two or more channels to group together, then from along the top, select *Create channel group*.

Ganz CORTROL Management C	, console - localhost	- 🗆 🗙
Configuratio	on > Channels Built-in Administrator account 🛓 C Search	৹ ≡
Configuration	Create channel group Edit Assign main stream recording configuration Assign group Di	isable
Organisations *	X 1 selected	
Networks *	TITLE ID DEVICE IP PORT ENABLED	
Servers	X 3MP PTZ (115) 3MP PTZ (114) 192.168.137.97 80 enabled	
🚍 Failover clusters *	X ZN8-F7NTFN10L (119) ZN8-F7NTFN10L (118) 192.168.137.199 80 enabled	
L Users	₩ ZN-B6DMP55HE (117) ZN-B6DMP55HE (116) 192.168.137.112 80 enabled	
	X ZN-DT2MTP-IR (108) ZN-DT2MTP-IR (107) 192.168.137.77 80 enabled	
Devices		
🔀 Channels		

Details

Details offers the option of a "Title" for the device group.

In the example, "Outdoor Channels" has been used for the device group title.

🔀 Channel group Outdoor Chann	els* _ 🗖 🗙
Channel group	Details
🏈 Details	Title
🍟 Members	Outdoor Channels
👫 Membership	Group name
📫 Permissions	
	OK Cancel





Members

This describes the adding of a channel or channels to a Channel grouping.

- In the example below, all outdoor channels can be considered potential members for the group, "Outdoor Channels."
- Choose a device from the *Available member's* section, and click on *Add* to add the device to the members group.
- To remove a member from the device group, choose the member from *Selected members* and click on *Remove*.

One channel may belong to several groups at once, as channels may have multiple roles in a surveillance system.

🔀 Channel group Outdoor Chann	nels*					- • ×
Channel group	Members					۹
🖋 Details	Selected members			Available memebers		
🍟 Members	TITLE	ID	TYPE	TITLE	ID	ТҮРЕ
👫 Membership				X ZN-DT2MTP-IR	(108) Channel	
🕂 Permissions				🔀 3MP PTZ	(115) Channel	
				🔀 ZN-B6DMP55HE	(117) Channel	
				ZN8-F7NTFN10L	(119) Channel	
	Remove			Add		
					ОК	Cancel

<u>Membership</u>

This describes the adding of the Channel group to a grouping, or "Membership," of additional groups. The example used is "Outdoor Channels," and is related to CORTROL Global usage, as related to an "Organization".

- The example Channel group "Outdoor Channels" could include a group called "Outdoor West Parking Lot channels."
- Choose a group from the *Available groups* section, and click on *Add* to add the group.
- To remove the group from the *Selected groups* column, select the group, and click on *Remove*.
- A device group may be linked to several groups, as device groups may have multiple roles in a surveillance system.

🔀 Channel group Outdoor Chanr	nels*					- 🗆 🗙
Channel group	Membership					٩
🖋 Details	Selected groups			Available groups		
Wembers	TITLE	ID	TYPE	TITLE	ID	ТҮРЕ
🕂 Membership						
📫 Permissions						
	Remove			Add		
					ОК	Cancel





Permissions

Group permissions allow assigning the accessibility to the group to a user or user group. Adding users and/or user groups is as simple as checking at least one permission for the target server. To remove, just clear the permissions by either deselecting them or by clicking the *Clear* button below the Permissions column.

Channels with an empty permission list will not be available to anyone except for the root (global) administrator.

🔀 Channel group Outdoor Chann	els*						- • ×
Channel group	Permissions						Q
🖋 Details	Selected users				Available users		
🝟 Members	TITLE	ID	TYPE	PERMISSIONS	TITLE	ID	TYPE
👫 Membership	💄 Brian	(10 U	ser	Administer	👪 Guards	(104)	User group
📫 Permissions				✓ ReceiveData	🎎 Managers	(105)	User group
				✓ AccessArchive			
				✓ Navigate			
				ControlDigitalOutput			
				Clear			
					OK		Cancel





5. Channel Properties Edit

Each channel contains several properties that can be edited. To access the channel properties, select *Edit* from the Channel options buttons along the top.

Ganz CORTROL Management C	Console - localhost	_ 🗆 🗙
Configuratio	on > Channels Built-in Administrator account 💄 C Search	৹ ≡
Configuration	Create channel group Edit Assign main stream recording configuration Assign group	Disable
Organisations *	X 1 selected	
Wetworks *	TITLE ID DEVICE IP PORT ENABLED	
Servers Servers	X 3MP PTZ (115) 3MP PTZ (114) 192.168.137.97 80 enabled	
🗮 Failover clusters *	X ZN8-F7NTFN10L (119) ZN8-F7NTFN10L (118) 192.168.137.199 80 enabled	
• Licore	X ZN-B6DMP55HE (117) ZN-B6DMP55HE (116) 192.168.137.112 80 enabled	
	X ZN-DT2MTP-IR (108) ZN-DT2MTP-IR (107) 192.168.137.77 80 enabled	
Devices		
🗙 Channels		

Details

Details offers the options of a "Title" for our channel, as well as configuration options for the main and substream recording configuration, and storage configuration.

- Main stream recording configuration: Selection of available recording configurations
- Main stream storage: Selection of available storage options, default storage, DAS, NAS
- Substream recording configuration: Selection of available recording configurations
- Substream storage: Selection of available storage options, default storage, DAS, NAS
- Edge recording configuration: Selection of available recording configurations
- Edge storage: Selection of available storage options, default storage, DAS, NAS
- Video lost time: Set in seconds for duration before an event is noted

hannel	Details		
🔎 Details	Title		
K Motion detector	ZN8-F7NTFN10L		
Membership	Channel title		
Permissions	Main stream recording configuration		
Grannel configuration	none Recording configuration	Change	
-j entimer configuration	Main stream storage		
	🖴 Default	Change	
	Storage		
	Substream recording configuration		
	none Substream recording configuration	Change	
	Substream storage		
	Default	Change	
	Substream storage		
	Edge recording configuration		
	none Educ recording configuration	Change	
	Edge storage		
	Default	Change	
	Edge storage		
	Video lost time		
	15		
	l'ime interval in seconds		



EAST COAST +1 (919) 230-8700 | WEST COAST +1 (310) 222-8600 | MEXICO +52 (55) 5280 4660

Ganzsecurity.com ©2016 CBC AMERICAS Corp. All Rights Reserved



Motion detector

Motion detection can take place on either the camera side or the server side. Camera side detection uses less CPU resources, while server side uses more.

🔀 Channel 3MP PTZ	X
Channel	Motion detector
🖋 Details	Mode
📌 Motion detector	Camera Motion Detection
🚑 Membership	Motion analysis will be carried out by a capable edge device (camera); this option is recommended for network cameras and is subject to availability,
🛉 Permissions	
🖽 Channel configuration	
	OK Cancel

The available options from the dropdown listing are as follows:

- Disabled •
- Camera Motion Detection: Motion detection is performed at the camera or edge, and passed onto the server. .
- Software (High Accuracy): CPU and virtual memory usage is much greater if this mode is selected as it performs motion analysis on entire video stream for greater detection accuracy.
 - Time interval in millisecond: Default set to 200 milliseconds 0
 - Sensitivity: levels from 0 1000, default set to 500 0
 - Use low resolution stream if available: Checked or unchecked 0
 - Motion detection exclusions: Grid support for 2x2 64x64 0
- Software (High Performance): CPU consumption is significantly lower if this mode is selected as it performs motion analysis for only key frames whose frequency can vary from several frames per second to one frame every few seconds. CPU consumption can be additionally reduced by increasing time interval between two analyzed frames.
 - Time interval in millisecond: Default set to 200 milliseconds 0
 - Sensitivity: levels from 0 1000, default set to 500 0
 - Use low resolution stream if available: Checked or unchecked 0
 - Motion detection exclusions: Grid support for 2x2 64x64 \cap

Channel ZNB-F7NTFN10L*	×					
Channel	Motion detector					
🖋 Details	Mode					
🗚 Mation detector	Software (High Accuracy)					
🗛 Membership	The motion detection will take place in VMS server software. Software analysis is sensitive to input image quality and availability of CPU resources, so this option is recommended for raw video frame grabber hardware.					
🛉 Permissions	Motion detection is based on decoding an entire video stream and processing frames, with its frequency defined by a specific time interval.					
E Channel configuration	Note that this mode might involve high CPU usage due to the complexity of the computation. Time interval 200 Time interval in milliseconds Sensitivity Use low-resolution detection sensitivity Use low-resolution stream if available Low-resolution stream will be used for motion analysis Motion detection exclusions					
	Apply OK Cancel					









<u>Membership</u>

This describes the adding of a channel or channels to a Channel grouping.

- In the example below, all outdoor channels can be considered potential members for the group, "Outdoor Channels."
- Choose a device from the *Available member's* section, and click on *Add* to add the device to the members group.
- To remove a member from the device group, choose the member from *Selected members* and click on *Remove*.

One channel may belong to several groups at once, as channels may have multiple roles in a surveillance system.

X Channel 3MP PTZ					- • ×
Channel	Membership				Q
🖋 Details	Selected groups			Available groups	
🗯 Motion detector	TITLE	ID	TYPE	TITLE	ID TYPE
🏯 Membership				🔀 Outdoor Channels	(120) Channel group
🕂 Permissions					
🔛 Channel configuration					
	Remove			Add	
					OK Cancel

Permissions

Permissions allow assigning accessibility of the channel to a user, or user group.

Adding users and/or user groups is as simple as checking at least one permission for the target server. To remove, just clear the permissions by either deselecting them or by clicking the *Clear* button below the Permissions column.

Permissions range from the following;

- Administer
- ReceiveData
- AccessArchive
- Navigate
- ControlDigitalOutput

A Channel with an empty permission list will not be available to anyone except for the root (global) administrator.

🗴 Channel 3MP PTZ*						- 🗆 X
Channel	Permissions					ৎ
🖋 Details	Selected users				Available users	
7 Motion detector	TITLE	ID	TYPE	PERMISSIONS	TITLE	ID TYPE
🗛 Membership	💄 Brian	(10 L	Jser	Administer	👪 Guards	(104) User group
📫 Permissions				✓ ReceiveData	👪 Managers	(105) User group
III Channel and investiga				✓ AccessArchive		
Charine coniguration				✓ Navigate		
				ControlDigitalOutput		
				Clear		
					ОК	Cancel





Channel configuration

Channel configuration (or Channel properties) offers the option of accessing the device's channel properties and/or the devices web browser interface. Either option offers access to the devices properties for various configuration options.

🗙 Channel 3MP PTZ*	🛛 🗙
Channel	Channel configuration
Details Motion detector	Channel properties
A Membership	Manage channel properties
🖷 Permissions	Open device in browser
🔛 Channel configuration	
	OK Cancel

Channel properties may range from the following, but are dependent on the level of integration between CORTROL and the camera SDK:

- Frame Adjustments
- Audio
- Events
- Substream
- External PTZ Control
- Dewarp
- Video Analytics
- Video Input
- Digital Outputs
- Video Configuration

rame Adjustments	Audio	Events	Substream
External PTZ Control	Dew	arp	Video Analytics
/ideo Input	Digital Outputs	Vide	eo Configuration
Jidaa Sarwaa Salaatii	- Caulan dhiab -		
Aldeo Source Selectio	on for multicitia	iner devices	
videosource_cam1			\sim
Create a duplicate (entry for the d	evice and as	sign another
video source to it			
			Create
Operation Mode			Create
Operation Mode			Create
Operation Mode Automatic - RTSP ((RFC 2326)		Create
Operation Mode Automatic - RTSP ((RFC 2326)	/ have to ma	Create
Operation Mode Automatic - RTSP (Note that sele settings on the	(RFC 2326) cted mode may e device, esp.	/ have to ma	Create
Dperation Mode Automatic - RTSP (Note that sele settings on thi web access. P	(RFC 2326) icted mode may e device, esp. lease refer to i	/ have to ma set using adi device manu	Create v tch internal ministrative al or contact
Operation Mode Automatic - RTSP (Note that sele settings on th web access. P manufacturer	(RFC 2326) cted mode maj edevice, esp. lease refer to for details on d	/ have to ma set using adi device manu levice capab	Create
Operation Mode Automatic - RTSP (Note that sele settings on th web access. P manufacturer	(RFC 2326) cted mode may e device, esp. lease refer to for details on o	/ have to ma set using ad device manu levice capab	Create tch internal ministrative al or contact lilities
Operation Mode Automatic - RTSP (Note that sele settings on the web access. P manufacturer	(RFC 2326) cted mode may e device, esp. lease refer to for details on o	/ have to ma set using ad device manu levice capab	Create
Automatic - RTSP (Automatic - RTSP (Note that sele settings on the web access. P manufacturer	(RFC 2326) cted mode ma device, esp. lease refer to for details on o	/ have to ma set using ad device manu levice capab	Create





6. Assign Main Stream Recording Configuration

The Channels tab offers the option of assigning a recording configuration to either the main or secondary video stream of a device or devices.

Note: Recording configurations have the options to be assigned to a single device, or multiple devices at a time.

Select one or more channels to assign a recording configuration to, then from along the top, select *Assign main stream recording configuration*.

Note: By selecting the down arrow to the right of *Assign main stream recording configuration*, the substream can be selected and assigned a configuration as well.

Ganz CORTROL Management Console - localhost					
Configuratio	on > Channels Built-in Administrator account 💄 C Search	৹			
Configuration	+ Create channel group Edit Assign main stream recording configuration 🔻 Assign group Disable				
Organisations *	X 1 selected				
🍪 Networks *	TITLE ID DEVICE IP PORT_ENABLED				
Servers	XX 3MP PTZ (115) 3MP PTZ (114) 192.168.137.97 80 enabled				
🗮 Failover clusters *	X ZN8-F7NTFN10L (119) ZN8-F7NTFN10L (118) 192.168.137.199 80 enabled				
1 Users	☆ ZN-B6DMP55HE (117) ZN-B6DMP55HE (116) 192.168.137.112 80 enabled				
	2 ZN-DT2MTP-IR (108) ZN-DT2MTP-IR (107) 192.168.137.77 80 enabled				
🗶 Channels					
🔛 Configuration					
🗲 Events & Actions					
🗛 Monitoring					
🛄 Audit	Recently added, 3 Recently updated, 0 Groups, 0 Channels, 4 Detached, 0 Enabled, 4				




Recording configuration

The default options for recording configurations are:

- No recording
- Continuous recording
- Recording by motion

Select the configuration to assign, and then select OK.

Note 1: If *Recording by motion* is selected, a warning related to camera side motion detection will appear.

- Depending on SDK integration levels, camera side motion detection may require manual configuration from the cameras browser interface.
- CORTROL motion detection configuration will be discussed under the Channel Edit: Motion detector.

Note 2: There is the option at the bottom for the creation of a new recording configuration.

- This also offers the ability for custom configuration options.
- Creation of new or custom recording configurations will be covered under "Recording Profiles."







7. Recording Profiles

Recording profiles allow users to set how data streams are recorded. Profiles cannot be assigned directly to devices; rather, these are used as components for recording schedules and recording configurations. For this reason, profiles do not include some settings, such as pre-recording interval. This setting is instead defined per-channel, therefore set in the recording configuration.

From Ganz CORTROL Management Console, select Channels.

Buttons on the upper panel give the option to create, edit and remove recording resources.

X
Built-in Administrator account 💄 🕑 Search 🔍 📃
nfiguration v Edit X 1 selected
ID TYPE
g (22) Recording profile
(21) Recording profile
(23) Recording profile
(31) Recording configuration
(33) Recording configuration
Recently updated, 0 Recording configurations, 3 Recording profiles, 3 Recording schedules, 0
(22) Recording profile (21) Recording profile (23) Recording configuration (31) Recording configuration (33) Recording configuration (33) Recording configuration (34) Recording configuration (35) Recording configuration (36) Recording configuration

Channels menu options

Functions		Options
	Configuration	Profile or schedule-based recording configuration to be assigned to channels
New Recording	Profile	Choose what data streams are recorded and in what mode (continuous/alert triggered)
	Schedule	Set a recording timetable based on profiles
Edit		Edit selected recording: Configuration, Profile, Schedule
Selected		Indicates number of selected recording functions. Releases functions when selected

Note: A recording resource cannot be deleted if it is currently in use, i.e., when a recording profile is assigned to a recording configuration or a schedule, or when any of the recording resources are assigned to a channel.





New Recording Configuration

Recording configurations are global recording arrangements that can be assigned to a per-channel recording setup. Recording configurations can be based on a single recording profile or on a pre-defined recording schedule.

From the Recording options, select *New recording configuration* from the top row of buttons.



Details

New Recording Configuration Details offers the following options:

- Title: Name or title for the recording configuration
- Controlled by: Indicates the controlling recording profile. (*Recording profiles covered on next page*)
- Prerecording interval: Time interval to keep recording before alert is signaled. (Default 10 seconds)
- Amount quota: Maximum amount of data to be kept in stored archive. (0 to disable quota function)
- Duration quota: Number of days to keep stored in archived footage. (0 to disable quota function)

Recording configuration Record	ing by motion			- • ×
Recording configuration	Details			
✓ Details	Title Recording by motion Recording profile as seen by others Controlled by Recording thy motion (23) Profile or schedule Prefile or schedule Prefile or schedule Prefile or schedule Prefile or schedule Q Maximum amount of data to be kept in stored archive. Leave 0 to disable Duration quota (days) 0 Number of days to keep stored in archive footage. Leave 0 to disable du	Change fsult is 10) e amount quota.	OK	ancel





New Recording Profile

Recording profiles allow users to set which data streams are recorded and how. Profiles cannot be assigned directly to devices; rather, these are used as components for recording schedules and recording configurations. Profiles do not include some settings, such as pre-recording interval. This setting is instead defined per-channel, therefore set in the recording configuration.

From the Recording option, select the down arrow at the right of New recording configuration and select New recording profile.

Ganz CORTROL Management 0	Console - localhost	- 🗆 🗙
Configuratio	n > Recording Bult-in Administrator account 💄 C Search	৹ ≡
Configuration	New recording configuration Edit Iselected	
Organisations *	New recording profile TYPE	
Networks *	New recording schedule Continuous recording (22) Recording profile	
Servers	No recording (21) Recording profile	
Failover clusters *	Recording by motion (23) Recording profile	
•	Continuous recording (32) Recording configuration	
L Users	No recording (31) Recording configuration	
Devices	Recording by motion (33) Recording configuration	
🔀 Channels		
Recording		

<u>Details</u>

Details offers two sections, continuous and event-driven recording.

Note: Only one mode may be selected at a time. If *Continuous recording* is selected, alert-based recording options will be grayed out.

For "Continuous recording," enable *Video stream* (Continuous video stream recording) and select the relevant options:

- Limit frame rate: Server side limiting frames per second (may result in frame reduction as low as key frame rate).
- Audio stream: Selection for inclusion in continuous stream recording.
- Motion stream: Selection for inclusion in continuous stream recording.
- Event stream: Selection for inclusion in continuous stream recording.
- VCA stream: Selection for inclusion in continuous stream recording.

Recording profile	Continuous recording – 🗖 🗙
Recording profile	Details
🖋 Details	Title
	Image: Second secon





For **motion-based recording**, enable *Video stream* in the *Alert recording* section and enable *Detected motion triggers alert* setting. To record still frames during non-motion periods, keep the *Video stream* option in *Continuous recording* section enabled, set the desired frame rate (e.g., 1FPS), then set high FPS or no limit in the *Alert recording* section. To record while motion is present, deselect the *Video stream* option in the *Continuous recording* section.

When selecting **motion-based recording configuration** with a disabled motion detector, the software will automatically suggest enabling motion detection for the target channel. The camera-side detector is given priority by default. If it is not available, the software-side detector will be enabled and set to high-performance mode. It is recommended to **review** the motion detector settings to make sure it operates as desired, especially if the camera-side detector is in use.

Alert recording
✓ Video stream Alert video stream recording
Limit frame rate
Maximum frame per second rate to video stream recording after alert was signalled (default is 10). Frame rate reduction on a video format with temporal compression(H.264/MPEG4) results in losing additional frame, esp. down to as low as key frame rate.
🗹 Audio stream
Alert audio stream recording
Post-recording interval 10 Length of time to continue recording after alert, in seconds (default is 10)
Detected motion triggers alert
Alert is triggered by motion detector
OK Cancel





New Recording Schedule

Recording schedules are sets of recording profiles that define what recording profiles are used depending on the day and time of the week.

From the Recording option, select the down arrow to the right of *New recording configuration*, then select *New recording schedule*.

Ganz CORTROL Management	Console - localhost –	• ×
Configurati	on > Recording But-in Administrator account 🛓 C Search	৹ ≡
Configuration	New recording configuration • Edit ¥ 1 selected	
Networks *	New recording produle TYPE Image: Continuous recording cl22 Recording profile	
Servers	No recording (21) Recording profile	
🗮 Failover clusters *	Recording by motion (23) Recording profile	
L Users	No recording (31) Recording configuration	
Devices	Recording by motion (33) Recording configuration	
🔀 Channels		
Recording		
E Configuration	-	
F Events & Actions		
💯 Monitoring		
🛄 Audit	Recently added, 0 Recently updated, 0 Recording configurations, 3 Recording profiles, 3 Recording schedules, 0	

Schedule Profile

Note that only a begin time is set for each added profile. The end time is determined by the start time of the next profile. For example, if continuous recording is required during weekdays and motion-driven recording during weekends, the continuous recording profile should be scheduled to start on Monday at 12 a.m., while the motion-driven profile should start on Saturday at 12 a.m.

Click OK to save and add the profile to the schedule. Multiple profiles will be automatically sorted based on their start time.

Use the *Edit* and *Remove* buttons below to manage the profiles added. When finished, click *OK* to save. The newly created schedule will be added to the item list in the *Recording* section.

O Recording schedule	Weekends ()nly*					×
Recording schedule	Details						
	Title Weekend Recording p Schedule	s Only rofile as seen by ot d profiles	hers]	
	DAY	▲ TIME	*	PROFILE			
	Monday	12:00 AM	No re	cording			
	Saturday	12:00 AM	Conti	nuous recording			
	Add	Edit					Remove
					OK	C	ancel

Schedule item setup		
Day	Time	
Saturday 🗸	12:00:00 AM	
Day of the week	Time of the day	
Recording profile		
Continuous recording (22)		Change
Description		
	ОК	Cancel





8. Users and Users Groups

The Ganz CORTROL Recording Server can be accessed from multiple CORTROL Clients. These clients may be running from the same recording server, from any number of remotely networked computers, and/or mobile devices running the CORTROL mobile app.

To protect the Ganz CORTROL Recording Server, Ganz recommends that as part of the initial CORTROL Recording Server configuration, the operator configure a new user group and user with restricted privileges.

User management is accessible via the Users component of the Configuration section. By default, the system already features a built-in global Administrator account and built-in Administrators group.

Note: The built-in Administrator user account and built-in Administrators group are root users with access to absolutely all available resources. As a result, the resources choice is unavailable for the Administrators group, and it is also impossible to add an Administrator user to any other group.

From Ganz CORTROL Management Console, select Users.

Buttons on the upper panel give the option to create, edit and remove User resources.

🗅 Gare CORTROL Management Console - locationt 🔹 🗖 💌					
E Configuratio	on > Users Built-In Administrator account 💄 C Search 🔾	. ≡			
Configuration	Image: Heat of the second s				
Organisations *	TITLE 🔺 ID LOGIN NAME EMAIL	_			
Networks *	L Built-in Administrator account (1) admin				
Servers	Built-in Administrators group (3)				
Failover clusters *					
L Users					
Devices					
🔀 Channels					
Recording					
Maps *					
Layout templates					
💯 Monitoring					
🖩 Audit	Recently added. 0 Recently updated. 0 Groups. 1 Users. 1				

Users menu options

Functions		Options
User Create a new user: Details, Membership, Resources		Create a new user: Details, Membership, Resources
New	w Group Schedule Create a new group: Details, Members, Membership, Resources	
Edit	•	Edit selected User/Group: Details, Members, Membership, Resources
Assign group		Assigning of user/group to a group
Selected		Indicates number of selected users/groups. Releases users/groups when selected





New User

New User offer the option for creating a new user for CORTROL: Select "New User", and configure the required Details, Membership, and Resources.

From the Users option, select New user.

Ganz CORTROL Management C	ionsole - localhost	- • ×
Configuratio	IN > Users Built-in Administrator account 💄 C Search	৹ ≡
Configuration	How user ▼ Edit Assign group Im X 1 selected	
Organisations *	TITLE ID LOGIN NAME EMAIL	
Networks *	La Brian (106) Brian bdenmeade@cbcamerica.com	
Servers	Le Built-in Administrator account (1) admin	
Failover clusters *	Built-in Administrators group (3)	
• Licore	Le Guards (104)	
▲ Osers	A Managers (105)	
🔛 Configuration		
🗲 Events & Actions		
🐺 Monitoring		
🛄 Audit	Recently added, 0 Recently updated, 0 Groups, 3 Users, 2	

<u>Details</u>

Details offers the options of User login name, User's full name, Email address, and Set password.

The Example below has entered the following entries:

- User login name: Jdoe (Typically a user login is the combination of first initial and last name.)
- User's full name: John Doe
- Email address: jdoe@emailaddress.com
- New password: 2112 (Strong passwords are highly recommended.)

LUser John doe*		-		
User	Details			
🏈 Details	User login name			
🎄 Membership	Jdoe			
Resources	Account name to log into the system. Case-sensitive			
	User's full name			
	John doe			
	Insert user's first name and last name			
	Em ail address			
	jdoe@emailaddress.com			
	Email address for notifications			
	☑ Set password			
	••••			
	Password to log into the server			
	••••			
	Reenter password			_
	OK	Cano	cel	





Membership

This describes the adding of a user to a user group.

- In the example below, the user can be considered a potential member for the "Managers group."
- Choose a group from the *Available groups* section, and click on *Add* to add the user to the group.
- To remove a user from a group, choose the group from *Selected groups* and click on *Remove*.

LUser John doe*				- • ×
User	Membership			হ
🖋 Details	Selected groups		Available groups	
👫 Membership	TITLE	ID TYPE	TITLE	ID TYPE
🚔 Resources	👪 Guards	(104) User group	& Built-in Administrators	(3) User group
			Amagers Managers	(10S) User group
	Remove		Add	
				OK Cancel

Resources

Resources allow assigning the accessibility to servers, devices, and channels to the user.

A resource may be added simply by checking at least one permission for the server, device, or channel. To remove, the permissions must be cleared; either by deselecting them or by clicking the *Clear* button below the Permissions column.

Users with an empty permission list will not be able to access any servers, devices, or channels, unless they are an administrator.

よ User John doe*									- 🗆 🗙
User	Resources								۹
🌶 Details	Selected resources	;		Permissions		A	vailable resource	s	
255 Weinbersnip	TITLE	ID	TYPE	PERMISSION	INHERITED FROM	1	TITLE	ID	TYPE
🚔 Resources	🔀 ZN-DT2MTP-IR	(10	Channel	🗌 Administer		**	Server	(101)	Server
	🔀 ZN-B6DMP55	(11	Channel	✓ ReceiveData			ZN-DT2MTP-IR	(107)	Device
	X ZN8-F7NTFN1	(11	Channel	AccessArchive			Outdoor Cam	(109)	Device group
				✓ Navigate			I 3MP PTZ	(114)	Device
				ControlDigital		X	3MP PTZ	(115)	Channel
							ZN-B6DMP55	(116)	Device
							ZN8-F7NTFN1	(118)	Device
				Clear		2	Outdoor Chan	(120)	Channel group
							ОК		Cancel





New User Group

A User group represents a grouping of similar intent based user (e.g., grouping security guards, or managers together). Grouping together user with similar intent or application, allows for quick administration.

Creating a user group:

From along the top, select the arrow to the right of "New user", and then select "New user group."

Ganz CORTROL Management C	Console - localhost				_ 🗆 🗙
Configuratio	on > Users		Built-in Administrator account 🎍	C Search	৹ ≡
Configuration	New user Edit New user group	Assign group	1 selected		
Networks *	L Brian	(106) Brian	bdenmeade@cbcamerica.com		
Servers	💄 Built-in Administrator account	t (1) admin			
🛱 Failover clusters *	Built-in Administrators group	(3)			
•	👪 Guards	(104)			
L Users	👪 Managers	(105)			
🔛 Configuration					
🗲 Events & Actions					
🟧 Monitoring					
🛄 Audit	Recently added, 0 Recen	ntly updated, 0	Groups, 3 Users, 2		

Details

Details offers the option of a title for the user group.

In the example below, the entry of "Guards" has been entered for the user group title.

👪 User group Guards			×
User group	Details		
🖋 Details	Title		
🍟 Members	Guards		
👫 Membership	Group name		
🚔 Resources			
	OK	Cance	I





<u>Members</u>

Members allows the addition of users to the user groups previously created.

Users may be grouped together for convenience and ease of administration

Choose the user to add/remove as a member of the user group by use of the *Add* and *Remove* buttons.

One user may belong to several groups at once, as users may have multiple roles at a surveillance location.

👪 User group Guards						х
User group	Members				c	2
🖋 Details	Selected members			Available memebers		
🍟 Members	TITLE	ID	TYPE	TITLE	ID TYPE	
👫 Membership	💄 John doe	(122) User		🎎 Built-in Administrators	(3) User group	
🖶 Resources				🎎 Managers	(105) User group	
				💄 Brian	(106) User	
	Remove			Add		
					OK Cancel	

Membership

This describes the adding of a user group to a grouping, or "Membership," of additional groups. The example used is "Guards," and is related to CORTROL Global usage.

- The example user group "Guards" could include the additional group called "Campus Guards."
- Choose a group from the Available groups section, and click on Add to add the group.
- To remove the group from the *Selected groups* column, select the group, and click on *Remove*.

A user group may be linked to several groups, as groups may have multiple roles in a surveillance system.

🕌 User group Guards					-	×
User group	Membership					Q
🏈 Details	Selected groups			Available groups		
🍟 Members	TITLE	ID	ТҮРЕ	TITLE	ID TYP	E
👫 Membership				👪 Built-in Administrators	(3) User group	
💼 Resources				🎎 Managers	(105) User group	
	Remove			Add		
					OK Ca	ncel





Resources

Resources allow assigning the accessibility to servers, devices, and channels to the user group.

A resource may be added simply by checking at least one permission for the server, device, or channel. To remove, the permissions must be cleared; either by deselecting them or by clicking the *Clear* button below the Permissions column.

User groups with an empty permission list will not be able to access any servers, devices, or channels, unless the group belongs to an administrator.

👪 User group Guards*									- 🗆 X
User group	Resources								۹
🖋 Details	Selected resources	;		Permissions		A	vailable resource	5	
Thempers	TITLE	ID	TYPE	PERMISSION	INHERITED FROM		TITLE	ID	TYPE
👫 Membership	🔀 ZN-DT2MTP-IR	(10	Channel	🗌 Administer		۲	Server	(101)	Server
🚔 Resources	🔀 ЗМР РТΖ	(11	Channel	🗹 ReceiveData			ZN-DT2MTP-IR	(107)	Device
	🔀 ZN8-F7NTFN1	(11	Channel	AccessArchive			Outdoor Cam	(109)	Device group
				🗹 Navigate			3MP PTZ	(114)	Device
				ControlDigital			ZN-B6DMP55	(116)	Device
						7\$	ZN-B6DMP55	(117)	Channel
							ZN8-F7NTFN1	(118)	Device
				Clear		73	Outdoor Chan	(120)	Channel group
							ОК		Cancel





9. Maps

Ganz CORTROL offers interactive, multi-layered maps. Maps offer a comprehensive visual overview of cameras and layouts, providing a complete overview of the entire surveillance installation. CORTROL offers both Maps, and map groups.

From Ganz CORTROL Management Console, select Maps.

Buttons on the upper panel give the option to create, edit and remove Map resources.



New Maps

By clicking on *New maps*, new interactive multi-layered maps are being created for use in a surveillance installation. Click on *New map*.

Ganz CORTROL Management Cor	nsole - localhost –	• ×	
	n > Maps edun 💄 C Search	৹ ≡	
Configuration	Hew map ▼ Edit Assign group III X 1 selected		
Servers	TITLE ORGANISATION		
External services	@ Test		
L Users			
Devices			
🔀 Channels			
Recording			
Maps			
🔜 Layout templates			
 Visual groups 			
E Configuration			
F Events & Actions			
Monitoring			
🛄 Audit			
	Recently added, 0 Recently updated. 0 Groups, 0 Maps, 1		







Details

Details offers two sections, one for the title of the map, and one for selection the map image.

- Title: Enter a descriptive label for the map.
- Select image: Select from PNG, JPG, TIF, BMP, or static GIF image formats.

S Map New Map*	×
Мар	Details
🖋 Details	Title
 ♥ Marking ♣ Membership ♣ Permissions 	Title New Map Map title Map image Select image. Select image of the desired plan in PNG, JPG, TIF, BMP or static GIF format. Please note, the system will reproduce the
	Provided image without scaling or enects. The best results will be with respirately induced pixels.

<u>Marking</u>

Once a map has been created, channels need to be added, and their location needs to be marked.

Drag the camera icon in the top left corner over to the map, and drop it to a location that corresponds to an actual camera.

Once the camera icon is placed, drag the red dots of its field of view until the values of the view and radius have been matched to those same values on the physical camera (or closest approximation to it).

Next, select the *Change* option, and then select the channel the camera marking represents.

♥ Map New Map*				-	□ ×
Мар	Marking				
🆋 Details	I I ()	而	Properties		
• Marking		_	Title	ZN8-M4NTFN4L	
👫 Membership	r r r r r r r r r r r r r r r r r r r		Icon	84	
+ Permissions	ROOM A ROOM B ROOM C ROOM E		Channel	ZN8-M4NTFN4	Change
	proversion of the second		Rotation angle	e -18.4349442	
	SPIRIT HALL ELEVATOR ?		view angle Radius	92 8618851	
			Show sector	2	
	Reset Fit	PLAN	-		
				OK Car	ncel





Membership

This describes the adding of a map to a group.

- In the example below, the map can be considered a potential member for a visual group
- Choose a group from the *Available groups* section, and click on *Add* to add the user to the group.
- To remove a user from a group, choose the group from *Selected groups* and click on *Remove*.

Map New Map* _ 🗆 ×							
Мар	Membership			۹			
🌶 Details	Selected groups		Available groups				
V Marking	TITLE	TYPE	TITLE	TYPE			
A Membership				Visual group			
📫 Permissions							
	Remove		Add				
				OK Cancel			

Permissions

Permissions allow assigning accessibility of the map to a user, or user group.

Adding users and/or user groups is as simple as checking at least one permission for the target server. To remove, just clear the permissions by either deselecting them or by clicking the *Clear* button below the Permissions column.

Permissions range from the following;

- Administer
- ReceiveData
- AccessArchive
- Navigate
- ControlDigitalOutput

A map with an empty permission list will not be available to anyone except for the root (global) administrator.

🛇 Map New Map*					- 🗆 ×
Мар	Permissions				Q
Details	Selected users			Available users	
	TITLE	TYPE	PERMISSIONS	TITLE	TYPE
🏯 Membership	💄 Brian	User	✓ Administer	👪 Guards	User group
🕂 Permissions			✓ View	👪 Managers	User group
				💄 Jdoe	User
			Clear		
				ОК	Cancel





New Map Group

By clicking on *New maps*, new interactive multi-layered maps are being created for use in a surveillance installation. To begin, click on *New map*.

Ganz CORTROL Management Co	nsole - localhost			- • ×
Configuration	n > Maps	admin 💄	C Search	৹ ≡
Configuration Servers	New map Edit Assign group Assign group Assign group Assign group	lected		
SE External services	🛛 Test			
L Users				
Devices				
🔀 Channels				
Recording				
Maps				
Layout templates				
 Visual groups 				
E Configuration				
Events & Actions				
🐲 Monitoring				
📕 Audt	Recently added, 0 Recently updated, 0 Groups, 0 N	Taps, 1		

<u>Details</u>

Details offers two sections, one for the title of the map, and one for selecting the map image.

Map group New Group*			×
Map group	Details		
🏈 Details	Title		
🍟 Members	New Group		
👫 Membership	Group name		
📫 Permissions			
	ОК	Cancel	





Members

Members allows for the adding of a map to an existing group or groups, allowing group members to access the map. Group membership helps extend the convenience and ease of administrating a large collection of maps. Choose the group to add/remove to a membership by use of the *Add* and *Remove* buttons.

◙ Map group New Group*				- 🗆 X
Map group	Members			۵
🖋 Details	Selected members	Selected members		
🍟 Members				
-	TITLE	TYPE	TITLE	TYPE
🗛 Membership			Test	Map
🖷 Permissions			New Map	Map
	Remove		Add	
				OK Cancel

Membership

This describes the adding of a map group to a grouping, or "Membership," of additional groups.

- The example map group below could include the membership with additional group
- Choose a group from the *Available groups* section, and click on *Add* to add the group.
- To remove the group from the *Selected groups* column, select the group, and click on *Remove*.

A map group may be linked to several groups, as groups may have multiple roles in a surveillance system.

Map group New Group*				_ □ ×
Map group	Membership			হ
Details We Manahara	Selected groups		Available groups	
 Members 	TITLE	TYPE	TITLE	TYPE
🚑 Membership			● Genstar Cameras	Visual group
+ Permissions				
	Remove		Add	
				OK Cancel





Permissions

Permissions allow assigning accessibility of the map to a user, or user group.

Adding users and/or user groups is as simple as checking at least one permission for the target server. To remove, just clear the permissions by either deselecting them or by clicking the *Clear* button below the Permissions column.

Permissions range from the following;

- Administer
- ReceiveData
- AccessArchive
- Navigate
- ControlDigitalOutput

A map with an empty permission list will not be available to anyone except for the root (global) administrator.

S Map New Map*					- 🗆 ×
Мар	Permissions				Q
Details Marking	Selected users			Available users	
	TITLE	TYPE	PERMISSIONS	TITLE	TYPE
👫 Membership	💄 Brian	User	🗹 Administer	👪 Guards	User group
🛉 Permissions			✓ View	👪 Managers	User group
				💄 Jdoe	User
			Clear		
				ОК	Cancel





10. Layout Templates

Ganz CORTROL offers the easy creation of custom layouts, or templates. The custom layout templates can be created and then used in any Ganz CORTROL Client applications connected to the target server.

To access layout templates via the Ganz CORTROL Console, go to the *Configuration* section in the bottom left panel and select the *Layout templates* component in the menu on the left.

Buttons on the upper panel give the option to create, edit and remove layout template resources.

Ganz CORTROL Management	t Console - localhost	_ 🗆 ×
Configuration	ion > Layout templates durin 🕹 C Search	৹ ≡
Configuration	✤ New layout template Edit iii ¥ 1 selected	
Servers	TITLE MATRIX VIEWPORTS	
External services	□ Demo 6 × 6 21	
L Users		
Devices		
🔀 Channels		
Recording		
Maps		
🔜 Layout templates		
 Visual groups 		
E Configuration		
F Events & Actions		
🐺 Monitoring		
📕 Audit	Recently added: 0 Recently updated, 0	

Details

Details offers the following options, as they relate to the creation of a custom layout, or template.

- Title: Enter a descriptive label for the layout template.
- Grid size: Select from any combination of 1 20 for the vertical, and 1 5 for the horizontal.
- Merge: Select adjoining cells, and select *Merge* to combine the cells into one.
- Unmerge: Select a merges collection of cells, and select unmerge to uncombined the cells.

The newly created layout template will appear in the item list and it will also appear in any connected Ganz CORTROL Client applications after synchronization.

Layout template New Layout*				×
Layout template	Details			
	Title New Layout Layout template name Grid size 4 w Viewports base grid: vertical × horizontal,	v = 16 maximum 100		
	1	2	3	4
	5			7
	8		,	9
	10	11	12	13
	Merge Unmerge			1 of 13 viewport(s) selected
				OK Cancel





11. Visual Groups

Visual groups are a grouping of channels or maps, that offer a single click point, to which Ganz CORTROL offers easy creation.

From Ganz CORTROL Management Console, and select "Visual groups".

Buttons on the upper panel give the option to create, edit and remove visual groups.

By clicking on "Create visual group" we can begin to created new visual groups for use in our surveillance installation.

Ganz CORTROL Management Co	nsole - localhost		_ 🗆 🗙
	> Visual groups	admin 👤 C Search	৹ ≡
Configuration	Create visual group Edit Im X 1 selected		
Servers	TITLE		
SExternal services	• Genstar Cameras		
L Users			
■ Devices			
🔀 Channels			
Recording			
Maps			
료 Layout templates			
 Visual groups 			
🔛 Configuration			
🗲 Events & Actions			
💯 Monitoring			
🛄 Audit	Recently added, 0 Recently updated, 0		

<u>Details</u>

Details offers the following options, as they relate to the creation of a visual group.

• Title: Enter a descriptive label for the layout template

● Visual group Genstar Cameras		×
Visual group	Details	
🖋 Details	Title	
🍟 Members	Genstar Cameras	
🕂 Permissions	Group name	
	OK Cancel	





<u>Members</u>

This describes adding channels, or maps to a visual group.

In this case, members refer to channels, and maps, as posed to CORTROL users.

Use members to create either a visual grouping of channels, or a visual grouping of maps, or a combination of both.

Choose the channel/map to add/remove to a membership by use of the *Add* and *Remove* buttons.

● Visual group Genstar Cameras				_ 🗆 🗙
Visual group	Members			Q
🖋 Details	Selected members		Available memebers	
🝟 Members	TITLE	TYPE	TITLE	TYPE
📫 Permissions	2 ZN8-B4NVF56	Channel	X ZN-DNT352XE-PTZ	Channel
	X ZN8-M4NTFN4L	Channel	🔀 XX-MD1-1080P-IR	Channel
	X ZN8-N4NFN4	Channel	🔀 iPhone	Channel
	🗙 Fisheye	Channel	Test	Map
			New Map	Map
			New Group	Map group
	Remove		Add	
				OK Cancel

Permissions

Permissions allow assigning accessibility of the map to a user, or user group.

Add users and/or user groups simply by checking at least one permission for the target server; remove by clearing the permissions - either by deselecting them or by clicking the *Clear* button below.

Permissions range from the following;

- Administer
- ReceiveData
- AccessArchive
- Navigate
- ControlDigitalOutput

A map with an empty permission list will not be available to anyone except for the root (global) administrator.

● Visual group Genstar Cameras					_ 🗆 🗙
Visual group	Permissions			۹	
🖋 Details	Selected users			Available users	
🍟 Members	TITLE	TYPE	PERMISSIONS	TITLE	TYPE
📫 Permissions			Uview	👪 Guards	User group
			Administer	👪 Managers	User group
				💄 Brian	User
				📕 上 Jdoe	User
			Clear		
				OK	Cancel





12. Streaming Server

Ganz CORTROL Streaming Server is a part of Ganz CORTROL software integrated into the Ganz CORTROL Server core. It is designed for video streaming to multiple web-browsing platforms such as Mozilla Firefox and Google Chrome.

Major features of the Ganz CORTROL Streaming Server include video stream live view, archive playback, and Pan-Tilt-Zoom control. The Ganz CORTROL Streaming Server optimizes video streaming for web or mobile clients, to a degree dependent on connection speed and device viewing capabilities.

Note: Audio and event streaming are **not** supported by the Ganz CORTROL Streaming Server.

From Ganz CORTROL Management Console, select Servers.

Buttons on the upper panel give the option to create, edit and remove Server resources.

Configuratio	n > Servers	Built-in Administrator account 💄	C Search	৹ ≡
Configuration	Edit 🗱 1 selected			
Servers	TITLE			
L Users	Sector 31-1			
Devices				
🔀 Channels				
Recording				
🗔 Layout templates				
🔛 Configuration				
nonitoring				

Servers menu options

Functions	Options
Edit	Edit selected Server: Details, Connections, Members, Membership, Permissions, Watchdog, Storage
Selected	Indicates number of selected servers. Releases users/groups when selected





<u>Details</u>

Details offers the option of a title for the Server.

In the example, the entry of "Server" has been used for the server title.

Server Server		×
Server	Details	
🖋 Details	Title	
🜻 Connections	Server	
🗛 Membership	Server name	
📫 Permissions		
📣 Watchdog		
Storage		
	OK Cancel	

Connections

Connections consists of the Ganz CORTROL VMS port (used by the CORTROL client), and the HTTP port for streaming connections used by the Ganz CORTROL Streaming Server.

Please make sure that the chosen HTTP port:

- Is opened on the target server firewall
- Is properly configured for port forwarding on all intermediate network equipment
- Is not being used by any other application or service on the target server or router

Server Server	X
Server	Connections
🖋 Details)/M/S port
🜻 Connections	60554
👫 Membership	VMS port
🛉 Permissions	HTTP port 8080
📥 Watchdog	HTTP port, enter 0 to disable
🖴 Storage	
	OK Cancel





<u>Membership</u>

This is a function related to CORTROL Global for adding a server to a server group(s), by way of membership. The use of membership, or grouping together servers is for convenience and ease of administration. Group membership helps extend the convenience and ease of administration that grouping initiates. Choose the server to add/remove to a group membership by use of the *Add* and *Remove* buttons.

Server Server						- 🗆 X
Server	Membership					Q
🖋 Details	Selected groups			Available groups		
🜻 Connections	TITLE	ID	TYPE	TITLE	ID	TYPE
👫 Membership						
📫 Permissions						
📥 Watchdog						
🖴 Storage						
	Remove			Add		
					OK	Cancel

Permissions

Permissions allow assigning accessibility to the server for a user, or user group. Adding users and/or user groups is as simple as checking at least one permission for the target server. To remove, just clear the permissions by either deselecting them or by clicking the *Clear* button below the Permissions column.

Permissions range from the following;

- Administer
- AccessArchive

A server with an empty permission list will not be available to anyone except for the root (global) administrator.

Server Server*							- 🗆 🗙
Server	Permissions						Q
🌶 Details	Selected users				Available users		
🜻 Connections	TITLE	ID	TYPE	PERMISSIONS	TITLE	ID	TYPE
👫 Membership	上 Brian	(10 Us	er	Administer	👪 Guards	(104)	User group
🛉 Permissions				AccessArchive	👪 Managers	(105)	User group
📥 Watchdog					💄 John doe	(122)	User
Storage							
				Clear			
					ОК		Cancel





Watchdog

The Server Watchdog is an integral part of the CORTROL server core. Watchdog protects the software from certain types of failures by automatically attempting to restart the server.

Watchdog operates based on the software and system's overall health monitoring. Default trigger values have been selected on the grounds of our analysis of extensive tests run on systems of different configuration and stability levels.

Although it is possible to disable the Server Watchdog service, we strongly advise against doing so, as the principal role of Watchdog is to keep the software operation as stable as possible under the given circumstances.

Watchdog operation can be tracked by messages in the Windows Application log. If experiencing frequent disturbances such as software restarts or server rebooting, this will be an indication of some serious issue related to the software, operating system, and/or underlying hardware. In such a situation, the best courses of action would be the following:

- Read the Windows Application Log, as these may already contain some indication of why Watchdog was triggered.
- Refer to the relevant topic in the Troubleshooting section of this manual to read about typical causes of such cases.
- Send a Problem Report from the faulty server, providing as much information as possible about the issue.
- Consult the CBC AMERICAS, Corp. technical support team directly via <u>cortrol@cbcamerica.com.</u>

Configuration

Watchdog operation can be configured for each server independently. To access Watchdog settings, open the Ganz CORTROL Console and select *Configuration* in the bottom left menu. Select *Servers* from the list on the left, then double-click the desired server, or simply click the *Edit* button on the top panel for the pre-selected server.

Server Server*	
arver	Watchdog
🖋 Details	
📮 Connections	Watchdog options
Membership	☑ Enable watchdog
Permissions	Operation
Watchdon	After the start of the application, the watchdog will not perform restart or reboot actions within this grace interval.
	Grace interval, seconds: 30
Storage	The watchdog may be set to reboot in cases of frequent failure. If at least the specified number of failures are detected within the specified amount of time, a restart of Windows will be initiated. Entering zero in any field below will disable the restart.
	Reboot interval, minutes: 5
	Number of failures to reboot: 3
	Performance
	Configure watchdog to monitor system performance, detect contingent situations and attempt to fix problems.
	Monitor system committed memory usage ratio
	Maximum allowed: 70
	Monitor system pool non-paged memory usage (MB)
	Maximum allowed: 0
	Monitor server private memory usage ratio
	Maximum allowed: 45
	Maximum allowed: 90
	Maintenance
	Watchdog may be configured to periodically restart server to clear any possible problems which could cause a deterioration in server system performance
	☑ Enable periodic restart
	Restart interval: 7 Days 🗸
	Indicate times between which maintenance restarts are allowed – e.g. from 19:00 to 23:20
	From: 23:00 🗘 To: 01:00 🗘
	OK Cancel





Setting	Description	Default Value
Enable Watchdog	Enables Watchdog operation for the target server	Enabled
Grace Interval, seconds	Time interval in seconds, counting from server start, during which Watchdog will not attempt to restart the software	30
Reboot Interval, minutes	Watchdog will reboot Windows if there have been a certain number (N) of software restarts (N is specified below) in the given time interval. The default for rebooting is 3 restarts in 5 minutes. Setting the specified number to 0 will disable rebooting.	5
Number of Failures to Reboot	Watchdog will reboot Windows in case there have been N software restarts in the time interval specified above. The default for rebooting is 3 restarts in 5 minutes. Setting the specified number to 0 will disable rebooting.	3
System Committed Memory Usage Ratio, %	Watchdog will restart the software if the ratio of total system committed memory exceeds the specified percentage. This value is shown under Memory section of Performance tab in the Windows Task Manager.	Enabled, 70%
System Pool Nonpaged Memory Usage, MB	Watchdog will restart software if the amount of system nonpaged pool memory exceeds the specified amount.	Disabled
Private Memory Usage Ratio, %	Watchdog will restart software if the amount of private memory used by server process exceeds the specified value.	Enabled, 45%
Virtual Memory Usage Ratio	Watchdog will restart software if the amount of virtual memory used by server process exceeds the specified ratio. Ratio shows the amount of virtual memory used by server process versus maximum per-process virtual memory allowed by the OS.	Enabled, 90%
Enable Periodic Restart	Enables automatic software restart every N days or hours. For troubleshooting purposes, it is recommended to use hours.	Enabled, 7 days
Enable Periodic Restart Hours	Limit periodic restart to specific hours (e.g., only restart at night). It is recommended to leave at least a 1h interval for the restarts.	Disabled

Storage

Storage allows for the management of storage directories, setting duration quotas, retention, and viewing storage usage statistics.

From Storage, select Open storage properties.

€ Server Server*	X	
Server	Storage	
Details Connections	Storage properties	
A Membership	Manage storage directories, set duration quota, retention and view storage usage statistics.	
🐴 Permissions	Open storage properties	
📥 Watchdog		
🖴 Storage		
	OK Cancel	





Directories

All available local disks (also mapped network shares that appear as drives in Windows Explorer) will be automatically listed and checked for recording with default archive directories.

Each storage location will be automatically assigned a quota of 90%. It is strongly advised to review all settings and make sure that all storage locations have sufficient free space. If necessary, a lower quota may be set if needed. It is recommended that every recording location have 10-15% of free space; this helps avoid any fragmentation effects, and allows CORTROL to effectively enforce recording quotas.

It is not advised to record to the system drive because it is often used by other processes such as defragmentation, system backup, and storing the Operating System itself. Recording onto the system drive may affect recording efficiency and stability, so by default, disk C: is not selected for recording.

To change the disk quota, simply highlight the desired location for storage from the item list, then enter quota size in GB and click *Apply changes*.

Storage properties						-	□ ×
Storage properties	Directories						
Directories	Edit directory details	+ New Directories					1
🛗 Duration quota	Bath	PATH	STORAGE	QUOTA	FREE SPACE	TOTAL SIZE	
2 Retention	E\Ganz CORTROL\Archive Files	1 F:\Ganz CORTROL\Archive Files	🖴 Default	439.45 GB	387.54 GB	488.28 GB	
	Integration and a second second	2 G:\Ganz CORTROL\Archive Fil	🖴 Default	1.21 TB	1.34 TB	1.34 TB	
	Quota (GB)	3 C:\Ganz CORTROL\Archive Fil	Disabled	51.81 GB	57.57 GB	111.24 GB	
	439.45						~
	Storage Default Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage Stor						~
	Apply changes Cancel						
					OK	Can	el

Duration Quota

The global recording duration limit for the server is set here. First, enable quota management, then enter desired number of days. All recordings older than the number of days specified will be erased.

Note: The global duration quota has priority over the individual (per-channel) duration quota that is set in the recording configurations.

Storage properties	_ 0 ×
Storage properties	Duration quota
Directories	Use the controls below to setup the global recording duration. Selected quota will be applied to all media devices and storage drives.
🛗 Duration quota	☑ Enable global duration quota management
$oldsymbol{\mathcal{Z}}$ Retention	Storage duration: 0 Days
	A Note that Ganz CORTROL Server will maintain configured maximal storage duration so that it will force erasure of footage older than the specified point in time.
	OK Cancel





Retention

The software erasing mechanism can be set so that it cleans up old recordings only during specific periods of time (e.g., when the recorder is less overloaded, or when recordings are less important).

To do this, enable the cleanup hours setting and specify the time period during which erasing is allowed.

This control has priority over storage quota. Setting insufficient cleanup time may lead to storage overflow and result in recordings being lost.

Storage properties	_ 🗆 🗙
Storage properties	Retention
Directories	To recover disk space, storage subsystem deletes the oldest footage and implements ring buffer recording. Use the controls below to finetune the process.
🛗 Duration quota	Enable cleanup hours
2 Retention	13:00 0
	A Note that reducing cleanup hours might result in there being a lack of storage space for new recordings. When the feature is enabled, reviewing and reducing disk quotas to avoid storage overflow is recommended.
	OK Cancel





13. Events & Actions

The purpose of Events & Actions is to define events, and designate the actions to take based on the events. Rules must be created to govern how events and actions take place, while being influenced by conditions and schedules.

<u>Rules</u>

CORTROL Rules define the interaction between the events that might happen, with the actions that need to take place. In order to create rules that bind an action to an event, the CORTROL Configurator is required.

From the Ganz CORTROL Management Console/Events & Actions, select Rules.

Buttons on the upper panel give the option to create, edit and remove Server resources.

Ganz CORTROL Management C	onsole - loca	host					- 🗆 🗙
Events Actio	ons > Ru	les			Built-in Administrator account 💄	C Search	৹ ≡
Events & Actions	Server	Server (101)		Change	Open configurator End	able Disable Test	
ବ୍ତ Rules		SOURCE	SOURCE TYPE	EVENT	EVENT TYPE	TARGET	TARGET TYPE
🗲 Events							
Actions							
📢 Global events							
U Conditions							
D Schedules							
😂 Mail servers							
H Configuration							
🗲 Events & Actions							
🐺 Monitoring							
📕 Audit	< Recent	ly added, 0	lecently updated, 0				>

Server Change

Server Change, related to CORTROL Global functionality, allows the selection of a CORTROL Server to which Rules can be created, modified, and/or deleted. Select *Change...* from the buttons on the upper panel that give the option to create, edit and remove Rule resources.

Within the Server Change function is a listing of available CORTROL Recording Servers to select from. Choose the server to be changed, then click on *OK*.

🔟 Select server				-	□ ×
					Q
Available servers					
	Title	ld	Ту;	e	
😂 Server		(101) Serve	er		
		[ОК	Can	cel





Configurator

vents	٩		Rules	Q		Actions	
EVENT			DIFE			ACTION	
21 West	a^		★ 21 Ist Finar Hallway >> Video lost			4 22 Parking Hain Entrance	
Video restored		>	1st Floor Hallway >> Generate alert		+	Generate alert	
ALARM		<	✓ X 1st Floor Lobby >> Video lost		<	A X Parking PTZ	
Global event			1st Floor Lobby >> Generate alert		>	Generate alert	
SECURITY BREACH			✓ 2nd Floor Hallway >> Video lost			4 Z Riverside	
Global event			2 2nd Floor Hallway >> Generate alert			Generate alert	
Scortrol Global Server			✓ 3rd Floor Hallway >> Video lost			⊿ XX West	
Recording error			X 3rd Floor Hallway >> Generate alert			Generate alert	
Disk excluding			✓ X Backdoor >> Video lost			4 (Daytime	
🔁 1st Floor - Lights			X Backdoor > > Generate alert			Set condition	
User button clicked			A X Parking ANPR >> Car detected			Unset condition	
🖏 2nd Floor - Lights			X Parking ANPR >> Open Gate - West			₄ Ü Gate Opened	
User button clicked			A XX Parking ANPR >> Car detected			Set condition	
R ALARM			Gate Opened >> Set condition			Unset condition	
User button clicked			Day time only			⊿ ≸ ALARM	
🔁 Close Gate - East			ALARM >> User button clicked			Send global event	
User button clicked			ALARM >> Send global event			A SECURITY BREACH	
🖏 Close Gate - West			A BALARY >> liter betten dicked			Send global event	
User button clicked			SECURITY BREACH >> Send global event			4 💼 Gmail	
🔁 Open Gate - East		-				Send mail to all admins	
User button dicked						A S Cortrol Global Server	
🚯 Open Gate - West		-				Write to application log	
User button clicked						Run program > ALARM	

The configurator is where Events and Actions are brought together under Rules.

Events: Events define a Device, Channel, and/or Server side symptom. A few examples include motion detection, recording error, and video loss. Events are initially created under Events & Actions, in the Events menu option.

Rules: Rules are defined by the selection of an event that is modified by a condition, schedule, or delay, that triggers an action to take place upon the meeting of the defined rule.

- Basic Rule: Event trigger Action without additional conditions.
- Basic Rule by Schedule: Event trigger Action when a schedule is active.
- Conditional Rule: Event trigger Action when condition is active.
- Conditional Rule by Schedule: Event trigger Action when schedule and condition are active.

Condition: Created under *Events & Actions > Conditions*. This option offers a shortcut to selecting from the list of conditions. **Schedule:** Created under Events & Actions > Schedules. This option offers a shortcut to selecting from the list of schedules. **Delay time:** Option of 00:00:00 - 24:00:00, with a pause mode:

- Create a separate action: A new action will be created even if there is an identical action queued (Delaying).
- Extend a postponed action: No new action will be created if there is an identical action queued.

Actions: Actions define a response to an Event, but can be influenced by rules, with regards to when they can and cannot happen. Initially created under Events & Actions: Actions menu option.

Note: At the top of each column for event, rules, and actions, are filter options that allow search by any part of device name/IP-address/etc. The buttons found between each column are used for adding/removing events and actions to and from the rules column.



EAST COAST +1 (919) 230-8700 | WEST COAST +1 (310) 222-8600 | MEXICO +52 (55) 5280 4660 Ganzsecurity.com ©2016 CBC AMERICAS Corp. All Rights Reserved

CBC AMERICAS Corp.



Events

Events define a Device, Channel, and/or Server side symptom. A few examples include motion detection, recording error, and video loss.

From Ganz CORTROL Management Console, select *Events & Actions > Events*.

Buttons on the upper panel give the option to create, edit and remove channel resources.

Description of event sources:

- Central server connected
- Central server disconnected
- Disk excluding
- Global event
- Motion
- Motion started
- Motion stopped

- Recording error
- User button clicked
- Video lost
- Video restored
- Digital Input
- VCA Input
- ExternalService

Ganz CORTROL Management Co	nsole - localhost				×
Events Action	ns > Events		admin 🚨	C Search	৹ ≡
Events 8. Actions	+ New event Edit X	1 selected			
& Rules	TITLE	EVENT TYPE	SOURCE		
🗲 Events	Central server connected	Central server connected			
Actions	🗲 Central server disconnected	Central server disconnected			
(1) Conditions	🗲 Disk excluding	Disk excluding			
0	🗲 Global event	Global event			
Schedules	🗲 Mation	Motion			
😂 Mail servers	🗲 Motion started	Motion started			
	Motion stopped	Motion started			
	🗲 Recording error	Recording error			
Configuration	🗲 User button dicked	Button pressed			
🗲 Events 8. Actions	🗲 Video lost	Video lost			
🐺 Monitoring	Video restored	Video restored			
🛄 Audt	Recently added. 0 Recently	r updated, 0			

Title: Auto populates based on selected

VCA Rule: Select from channel associated

• Source: Select from available channels

• Event type: VCA

source

rules.

New Event

Creation of a new event offers the following options;

Change..

OK Cancel

- Event type: Digital Input
- Title: Auto populates based on selected source
- Source: Select from available channels
- Digital input: Select from dropdown

3MP PTZ (115)

Digital input nane Digital input Digital input m nane Digital input mode Reload

• Digital input mode: Select from dropdown

Event	Details		
🖋 Details			
	Event type		
	VCA	2	
	Select event type from list of possible event types		
	Title		
	ZN-DNT352XE-MIR VCA Zone 0-Presence		
	Event name		
	Source		
	ZN-DNT352XE-MIR		Change
	Event source		-
	VCA rule		
	Zone 0-Presence	v	
	VCA rule		
	Reload		

- Event type: ExternalService
- Title: Auto populates based on selected source
- Source: Select from available channels
- Target event: Select from dropdown

Europt			
.ve ic	Details		
🖋 Detaïs	Event hose		
	even gpc		
	ExternalService	*	
	Select event type from list of possible event type		
	Title		
	ZN-DNT352XE-MIR ExternalService		
	Event name		
	Source		
	X ZN-DNT352XE-MIR		Change
	Event source		
	Service group		
	none	0	Change
	Service group		
	Target event		
	none	~ 0	
	Target event	_	





Actions

Actions define a response to an Event, but can be influenced by rules, with regards to when they can and cannot happen.

From the Ganz CORTROL Management Console, select Actions.

Buttons on the upper panel give the option to create, edit and remove channel resources.

Ganz CORTROL Management Cor	nsole - localhost					×
Events Action	ns > Actions			admin 👤	C Search	ৎ ≡
Events & Actions	 New action 	₩ 1 selected				
∞ Rules	TITLE	ACTION TYPE	TARGET			
🗲 Events	Generate alert	Generate alarm				
Actions	Generate alert substream	Generate substream alarm				
U Conditions	Pop-up on screen	Pop-up an object on screen (-s)				
Schadulas	Send global event	Send global event				
3 schedules	Set condition	Set condition				
S Mail servers	Test mail	Send mail	📽 Gmail			
E Configuration	Unset condition	Unset condition				
🗲 Events & Actions						
🙀 Monitoring						
💵 Audit	Recently added, 1	ecently updated, 0				

New Action

Note that only begin time is set for each added profile:

- Write to application log
- Activate recording profile
- Activate substream recording profile
- Send mail
- Run program
- Active PTZ preset
- Control digital output
- Pop-up an object on screen (-s)
- Highlight on map or all maps where corresponding Action Target is present

Action	X
Action	Details
🖋 Details	Action type
	Select action type
	Activate recording profile Activate substream recording profile
	Send mail
	Activate PTZ preset
	Control digital output Pop-up an object on screen (-s)
	Highlight on map or all maps where corresponding Action Target is present.
	OK Cancel





Write To Application Log

When selected as an action response to an event, this action will write a log to the Windows Event Viewer.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Log message: Enter a descriptive message, stating the transpired event, and a suggested course of action.

Action			-	×
Action	Details			
	Action type Write to application log v Select action type from list of available action types Title Write to application log Action name Log message Log message		< >	0
	OK	Cancel	I]

Activate Recording Profile

When selected as an action response to an event, this action will activate a recording profile on a selected channel.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Target: Referring to the selected channel to have record based on the recording profile.
- Recording profile: Refers to the recording profile to be associated with the target channel.

Action *				- 🗆 🗙
Action	Details			
▶ Details	Action type Activate recording profile V Select action type from list of available action types Title ZN-DT2MTP-IR Activate recording profile Recording by motic Action name Target XZN-DT2MTP-IR (108) Action target Recording profile Recording profile Recording profile	Change		
			ОК	Cancel





Activate Substream Recording Profile

When selected as an action response to an event, this action will record the substream based on a recording profile.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Target: Referring to the selected channel whose substream is to be recorded based on the recording profile.
- Recording profile: Refers to the recording profile to be associated with the target channel's substream.

Action *	_ = = •
Action	Details
Petals	Action type Activate substream recording profile Setest action types from list of available action types Title ZN-DTZMTP-IR Activate substream recording profile Continu. Action name Target ZN-DTZMTP-IR (108) Action target Recording profile Recording profile Recording profile
	OK Cancel

Send Mail

When selected as an action response to an event, this action will generate and send an email to a recipient.

- Title: Enter a defining title that would reflect the transpired event the action is depending on.
- Target: Refers to the selected SMTP server.
- To (Send to): Enter the recipient's email address here.
- Subject: Enter the subject of the email here (programmable with parameters).
- Body: Enter a descriptive message, related to the event behind the notification requirement.

Send mail Parameters: Can be entered into the email Subject and or email Body.

- {EVENT_TITLE} Event as in Video Lost, Video Restored, Motion, Digital Input or VCA Event
- {EVENT_SOURCE_TITLE} User defined camera title: Hall Camera
- {EVENT_UTIME} UTC time: 3:28:30 PM (*Taken from Camera*)
- {EVENT_UDATE} UTC date: 7/7/2016 (*Taken from Camera*)
- {EVENT_TIME} Local time: 11:28:30 AM (Taken from Server)
- {EVENT_DATE} Local date: 7/7/2016 (*Taken from Server*)
- {EVENT_TIMESTAMP} UTC timestamp: 2016-07-07 15:28:30:287 (Taken from Camera)

Action Gmail Send ma	J*	>
tion	Details	
✔ Details	Action type Bend mail Tate Gmail Send mail Action noise Target Changen Mail arcset # frome a selection, the action will be alable on all mail stream. Te Separatification of the const Subject of the const	
	INVERT_UTMAD INVERT_UTMAD INVERT_UTMAD INVERT_UTMAD INVERT_UTMASTANNY	< >







<u>Run Program</u>

When selected as an action response to an event, this action will run a predetermined program.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Target: Refers to the selected recording server to which the program will be executed on/against.
- File path: Enter the file path to the program or executable (e.g., C:/Programs/Office/Excel.exe).
- Parameters: This is code that modifies how the program/executable performs.
- Run mode: How the program/executable is running with regards to visibility. (Hidden, Minimized, Normal)

Action Details Action type Run program Select action type from list of available action type: Title Run program EXCEL cition mane Target Securit cition mane Target CoProgram Files/Microsoft Office/toot/Office16/EXCELEXE Executable file gath Parameters Parameters Parameters passed to the executable Parameters Parameters passed to the executable Parameters	Action *			- • ×
✔ Details Action type Run program ▼ Select action type from list of available action types ▼ Title Run program EXCEL Action name Target ♥ Server (10) Change Target revers. File path C\\Program Files\Microsoft Office\voot\Office16\EXCELEXE Executable file path Parameters Parameters P	Action	Details		
	Petals	Action type Run program v Select action type from list of available action types Trite Run program EXCEL Action name Target Target terms Target terms File path CAProgram Files/Microsoft Office/root/Office16\EXCEL.EXE Executable file path Parameters Parameters Parameters Parameters Milden v Run mode	Change	

Active PTZ Preset

When selected as an action response to an event, this action will run a predetermined PTZ Preset.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Target: Refers to the selected device channel, with the prerequisite programmed presets.
- PTZ priority: Prioritizing the PTZ allows prioritization where PTZ control comes from.
- PTZ preset: Refers the prerequisite programmed preset that is selected to run upon an event trigger.

Note: PTZ priority is defined by 0 - 10 with 0 for the highest priority. A user with higher priority can obtain PTZ control from other users. Thus if an operator is set to 5 and a guest set to 10, the operator with the higher priority of 5 will control PTZ.

Details			
Action type Activate PTZ preset ▼ Select action type from list of available action types ▼ Title ■ ZxH-DNT352XE-PTZ Activate PTZ preset Action rame. Target ■ Action staget PTZ priority 1 ▼ PTZ priority 1 PTZ preset ▼ Inone ▼ PTZ preset ▼ Reload ■			
	Action type Activate PTZ preset v Select action type from first of available action types Title ZN-DNT352XE-PTZ Activate PTZ preset Action name. Target ZZN-DNT352XE-PTZ Action target PTZ priority 1 v PTZ priority PTZ preset Inone v PTZ preset Inone v PTZ preset Inone v	Action type Activate PTZ preset V Select action type from fits of available action type Title ZN-DNT352XE-PTZ Activate PTZ preset Action name. Target V ZZ-DNT352XE-PTZ Activate PTZ priority I I I I I I I I I I I I I I I I I I I	Action type Activate PTZ preset Safet action type from list of available action types Title ZN-DNT352XE-PTZ Activate PTZ preset Action name. Target ZZ ZN-DNT352XE-PTZ Action target PTZ priority 1 v PTZ preset Inone v PTZ preset Reload







Control Digital Output

When selected as an action response to an event, this action will run a predetermined digital I/O.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Target: Refers to the selected device channel, with the prerequisite programmable I/O port(s).
- Digital output: Refers the prerequisite programmable I/O that is selected to run upon an event trigger.
- Digital output mode: Set to normally open / normally closed.

Action *		×
Action	Details	
✓ Details	Action type Control digital output Select action type from list of available action types Title MMP PTZ Control digital output Action name Target 2 3MP PTZ (115) Action target Digital output Digital output Digital output Digital output mode none Uigital output mode Reload	
		OK Cancel

Pop-up an Object on Screen (-s)

When selected as an action response to an event, this action will pop-up a predetermined object on screen.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Target: Refers to the selected device channel that will act as the pop-up video source.
- Videowall: Refers a known Videowall configuration, that is selected to run upon an event trigger.

Action *	X
Action	Details
	Action type Pop-up an object on screen (-s) Select action type from list of available action types Title 3MP PTZ Pop-up an object on screen (-s) none Action name Target Target Target Videowall Number of the screen of
	OK Cancel




Highlight on Map or All Maps Where Corresponding Action Target is Present

When selected as an action response to an event, this action will cause a device channel to highlight on a map.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Target: Refers to the selected device channel, to which will be selected and highlighted on a map.
- Highlight on: Refers the selected map, or all maps to which the device channel is associated.

Action *				- 🗆 🗙
Action	Details			
	Action type Highlight on map or all maps where corresponding Acti v Select action type from list of available action types Title 3MP PTZ Highlight on map or all maps where corresponding Action name Target C 3MP PTZ (115) Action target Highlight on All maps Map or all maps	Change Change		
			OK	Cancel

Conditions

The Events & Actions Schedules allow the creation of a rule that says when an action can and not take place, based on time.

From the Ganz CORTROL Management Console, select Conditions.

Buttons on the upper panel give the option to create, edit and remove listed conditions.

Ganz CORTROL Management Co	nsole - localhost		- 🗆 ×
Events Actio	ns > Conditions	admin 🚨 C Search	৹ ≡
Events & Actions			
℃ Rules	TITLE SERVER		
🗲 Events	U Server On 📚 Server		
Actions			
U Conditions			
Schedules			
📚 Mail servers			
E Configuration			
🗲 Events & Actions			
🌉 Monitoring			
🕕 Audit	Recently added, 1 Recently updated, 0		







New Condition

Currently, only a title option is programmable within the new global event selection.

- Title: Enter a defining title that would reflect the transpired event the action is dependent on.
- Server: Select the recording server to which the condition will be performed against.
- Default state: The initial value that the Event Condition takes at server startup. (On / Off)

ப் Condition Demo*			×
Condition	Details		
	Title Demo EventCondition name Server Server Server Default state On The initial value that EventCondition takes at sever startup	Change	
			OK Cancel

Schedules

The Events & Actions Schedules allow the creation of a rule that says when an action can and not take place, based on time. Schedules supports the creation of multiple schedules, consisting of a "From" and "To" day and time function.

From the Ganz CORTROL Management Console, select Schedules.

Buttons on the upper panel give the option to create, edit and remove listed schedules.

Ganz CORTROL Management Co	nsole - localhost –	□ ×
Events Action	ns > Schedules data 🛓 C Search	৹ ≣
Events & Actions	➡ New schedule Edit	
℃ Rules		
₣ Events	Demo	
Actions		
U Conditions		
Schedules		
🖀 Mail servers		
🗲 Events & Actions		
🜉 Monitoring		
🛄 Audit	Recently added, 0 Recently updated, 0	





<u>Details</u>

Details offers the following options, related to the created schedule requirement:

- Title: Enter a defining title that would reflect the purpose of the schedule.
- List of schedules: A list of all the currently created and or available schedules, or schedule items.
 - Day from: Selection of the starting day of the schedule item
 - \circ ~ Time from: Selection of the starting time of the day for the scheduled item
 - Day to: Selection of the ending day of the schedule item
 - Time to: Selection of the ending time of the day for the scheduled item

Note: Days range from Sunday - Saturday, while time ranges from 12am to 12pm, non-military style.

Use the *Add, Edit* and *Remove* buttons below to manage the listed schedule items. When finished, click *OK* to save. The newly created schedule will be added to the schedule list.

Schedule Demo∗		- • ×
Schedule	Details	
🖋 Details	Tide Demo	
	Event schedule title List of schedules	
	DAYTHOM = TIME HIGH = DAYTO = TIME TO = Monday 12:00 AM Saturday 12:00 AM	
	Add Edit	Remove
	OK	Cancel

Schedule item setu	р		
Day from		Time from	
Monday	~	12:00:00 AM	-
Day of the week		Beginning of the period d	uring
Day to		Time to	
Saturday	~	12:00:00 AM	-
Day of the week		End of the period during v	vhich th





Mail Servers

Mail Servers list potential email or SMTP server accounts. These accounts act similar to an account setup in Microsoft Outlook or Outlook express. Mail Servers provide a portal through which a configured email notification can be sent through, in order to be delivered to a specified email recipient. Email notifications are typically linked to a server or device event, providing an action in response to that event.

From the Ganz CORTROL Management Console, select Mail servers.

Buttons on the upper panel give the option to create, edit and remove mail server resources.



New Mail Server

New mail server offers the following options, related to the configuration of an SMTP client requirement:

- Title: Enter a defining title that would reflect the host of the SMTP service provider.
- Host: The SMTP or IP address of the service provider (e.g. smtp.gmail.com).
- Port: The communications port dictated by the security mode, and SMTP service (e.g. 587).
- Username: The authorized user ID of the account holder for the SMTP service.
- New password: The authorized user password of the account holder for the SMTP service.
- Security mode: None (Port 25) / TLS (Port 587) / SSL (Port 465)
- Sender: Email address used to identify the sending party of an email notification.
- Aggregation count: The number of emails to group for sending at one time
- Aggregation time: The number of emails to group for sending with in a select unit of time

Mail server Gmail*	- 0	×
al server	Details	
🌶 Details	74	
	Ciman Mail server name	
	No.	
	sin gagin air.com	
	Best	
	P.07	
	Dot number	
	Linear sec.	
	lakeder.	
	Jonnobe	
	The first exceeded	
	in: Set password	
	Password to log into the server	
	Security mode	
	The second	
	Security mode	
	Sector	
	Idea@amailaddeact.com	
	Sender's email address	
	Accretation count	
	10	
	Aggregation count	
	Aggregation time	
	10	
	Aggregation time (sec.)	
	OK Cancel	





14. Events & Actions – 4 Exercises

Camera Motion Pop-up

- 1. Requirement: A camera with motion detection enabled.
 - a. Go to Management Console / Channels
 - b. Highlight a camera, and select *Edit*.
 - c. Details: Confirm main stream recording is *Recording by motion*.
 - d. Motion detector: Confirm Camera Motion Detection is selected.
 - e. Go to camera's browser interface and confirm that camera side motion detection is enabled.
- 2. Within Events and actions configurator:
 - a. Go to Management Console / Rules
 - b. Select Open configurator
 - c. Events column: Select Motion from the motion enabled camera.
 - d. Click the > icon to move the event to the Rules column.
 - e. Actions column: Select Pop-up on screen from the same motion enabled camera.
 - f. Select *OK* to save configuration.
- 3. Within the client:
 - a. Confirm no cameras are currently showing.
 - b. Trip motion for camera that was configured with *Events and actions configurator*.
 - c. The camera will pop up in the first available window, upon detecting motion.
 - d. A flashing a red border will appear around this window to draw attention.









Map Highlight/Motion Pop-up

- 1. Requirement: A map, a camera with motion detection enabled, and a new action.
- 2. Go to Management Console / Maps
 - a. Select New map
 - b. Title: Training
 - c. Select the provided map from training.
 - d. Select Marking
 - e. Place cameras
 - f. Select OK
- 3. Go to Management Console / Events & Actions / Actions
 - a. Select New action
 - b. For Action type, select Highlight on map or all maps where corresponding action Target is present
 - c. Title: Highlight on map
 - d. Target: Camera with motion detection enabled
 - e. Highlight on: Created map
- 4. Within Events and actions configurator:
 - a. Go to Management Console / Rules
 - b. Select Open configurator
 - c. Rules column: Select Camera >> Motion
 - d. Actions column: Select *Highlight on map* from the same motion enabled camera.
 - e. Click on the + to add action to rules.
 - f. Select *OK* to save configuration.
- 5. Within the client:
 - a. Bring up the Map into the client.
 - b. Confirm no cameras are currently showing.
 - c. Trip motion for camera that was configured with *Events and actions configurator*.
 - d. The camera icon will flash red on the map.
 - e. The camera will pop up in the first available window, upon detecting motion.
 - f. A flashing a red border will appear around this window to draw attention.









Video Lost: Generate Alert

- 1. Requirement: A camera with a live video channel.
- 2. Within the Events and actions configurator:
 - a. Go to Management Console / Rules
 - b. Select Open configurator
 - c. Events column: Select Video lost from the motion enabled camera.
 - d. Click the > icon to move the event to the Rules column.
 - e. Actions column: Select *Generate alert* from the same motion enabled camera.
 - f. Click the *+* icon to move the *Actions* to the Rules column.
 - g. Select *OK* to save configuration.
- 3. Within the client:
 - a. The Map and camera should still be loaded in the client.
 - b. If not, relaunch the client, and load the map and camera required.
 - c. Click on the camera channel, to reveal the action icons.
 - d. Click on the bell icon that represents the device alerts.
 - e. Disconnect the camera from the network.
 - f. The video signal will be lost, and the channel will go black.
 - g. A time out message will then appear in the device alerts window.
 - h. Reconnect the camera.











Video Lost: Email Notification

- 1. Requirement: A camera with a live video channel.
- 2. Within Events and actions configurator:
 - a. Go to Management Console / Mail servers
 - b. Select New mail server
 - c. Title: A label representing the provider is suggested (e.g. Gmail).
 - d. Host: The SMTP address of email provider
 - e. Port: Dependent on provider, (default 25, TLS 587, SSL 465)
 - f. Username: Email account logon ID
 - g. New Password: Email account password
 - h. Security mode: Based on selected port, (none, TLS, SSL)
 - i. Sender: Email address could be from providing account, or a different account.
 - j. Aggregation count/time: Leave setting as is
- 3. Go to Management Console / Events & Actions / Actions
 - a. Select New action
 - b. For Action type, select Send mail
 - c. Title: Relevant to the nature of the notification (e.g. Lost video)
 - d. To: Email recipient of notification
 - e. Subject: For this exercise, two email parameters supported will be used, {EVENT_SOURCE} & {EVENT_TITLE}
 i. Using these parameters, the Email will list in subject *Camera* and *Video Lost*.
 - f. Body: Other email parameters may be used, or create a unique message.
 - g. Select OK to save.
- 4. Within Events and actions configurator:
 - a. Go to Management Console / Rules
 - b. Select Open configurator
 - c. Rules column: Select Camera >> Video lost
 - d. Actions column: Select *Email Notification* from the Email Server actions.
 - e. Click on the + to add action to rules.
 - f. Select *OK* to save configuration.

Server Server						
Events	٩		Rules Q		Actions	
EVENT			RULE		ACTION	
2 PixelPro			4 🗶 PixelPro >> Video lost		> X PixelPro	
2 ZN8-B4NVF56		_	🗙 PixelPro >> Generate alert	_	> X ZN8-B4NVF56	
ZN8-F7NTFN10L		<	✓ A DixelPro >> Video lost	<	> X ZN8-F7NTFN10L	
ZN8-P5NTAF62L			😭 Gmail >> Email Notification	>	> X ZN8-P5NTAF62L	
Server			⊿ X ZN8-B4NVF56 >> Motion		🗉 🖴 Gmail	
Recording error			🗙 PixelPro >> Pop-up on screen		Email Notification	
Disk excluding			X PixelPro >> Highlight on map		> 🕑 Demo	
			U Condition Clear			
			9 Schedule			
Event Edit event			R Delay timer		Action Erlit action	







15. Monitoring

Ganz CORTROL provides health monitoring data for server, devices and channels, as well as live status of connected user sessions.

From the Ganz CORTROL Management Console, select *Monitoring*.

Buttons on the bottom panel offer quick information reference points, and a filter option.

<u>Servers</u>

The server status includes information about connection and synchronization. Both have a numeric status code and corresponding textual status.



Devices

The device summary provides configuration update status and the time of the last communication between the server and device.







Channels

Along with configuration update results, channel monitoring contains information about the following:

- Video loss
- Stream bit rate
- Stream frame rate (FPS)
- Recording status

Recording status uses the following denotations: 0=currently not recording, 1=recording is active. Note that 'not recording' may mean either that recording is not configured (disabled) or that recording has not been activated according to the schedule.

Ganz CORTROL Management C	onsole - localhost								-	• ×
Honitoring :	> Channels				Buit	in Administrator account 💄 🛛 C	Search		C	२ ≡
Monitoring	TITLE	ID S	STATUS	SERVER	DEVICE	STATUS UPDATE TIME	VIDEO LOST DURATION	KBIT/S	FPS RECORDING	RECORDIN
-	🔀 3MP PTZ	(115) N	Norm al	Server (101)	3MP PTZ (114)	6/23/2016 11:10:24 AM	No video	0	0.0 Activated	
Servers	X ZN8-F7NTFN10L	(119) N	Normal	Server (101)	ZN8-F7NTFN10L (118	8) 6/23/2016 11:10:24 AM	No video	0	0.0 Not activated	
Devices	X ZN-B6DMP55HE	(117) N	Norm al	Server (101)	ZN-B6DMP55HE (116	6/23/2016 11:10:24 AM	No video	0	0.0 Activated	
🗙 Channels	X ZN-DT2MTP-IR	(108) N	Norm al	Server (101)	ZN-DT2MTP-IR (107)	6/23/2016 11:10:24 AM	No video	0	0.0 Not activated	
LUser sessions										
🚥 Video walls *										
🖽 Configuration										
🗲 Events & Actions										
💯 Monitoring										
🛄 Audit	<									>
	Recently added, 0	Re	ecently (updated, 0	Groups, 0	Replication of	channels, 0 Deta	ched, O	4 filtered 🕱	:

User Sessions

This monitoring area displays currently active incoming Ganz CORTROL Client connections with the following details:

- User account
- Remote address
- Remote (outgoing) port
- Session start time
- Type (Ganz CORTROL Console/Ganz CORTROL Client)

Disconnected sessions will automatically disappear from the list.

🔟 Ganz CORTROL Management C	onsole - localhost						×
Honitoring :	> User sessions			Built-in Administr	ator account	🛓 C Search	વ ≡
Monitoring	USER	ID	REMOTE ADDRESS	START TIME	TYPE	SOFTWARE VERSION	
-	💄 Brian	(127.0.0.1:52543	6/23/2016 11:15:20 AM	Monitor	1.0.0.54046	
Servers	💄 Built-in Administrator account	(1)	127.0.0.1:52160	6/23/2016 10:45:41 AM	Console	1.0.0.54046	
Devices							
X Channels							
L User sessions							
III Video walls *							
田 Configuration							
🗲 Events & Actions							
💯 Monitoring							
📕 Audit	Recently added, 0 Recent	tly up	odated, 1				





16. Audit

To access the global audit log in Ganz CORTROL Console, choose the *Audit* section in the bottom-left-hand panel. Use the *Search* field in the upper-right-hand menu to filter the records. Press the *Refresh* button to reload the item list.

The audit log contains detailed information about the most important user activities and server events.

From the Ganz CORTROL Management Console, select Audit.

Buttons on the top panel offer filter definition, view, and select options.

Ganz CORTROL Management Co	nsole - localhost	- = ×
Audit > Serve	ers Built-in Administrator account 💄 C Search	৹ ≡
Audit	Define filter View 🗱 1 selected	
Servers	ID TIME SERVER EVENT INFORMATION	
上 Users	(296) 6/23/2016 11:15:53 AM Server (101) Configuration loaded The operation completed successfully	^
	(280) 6/23/2016 10:45:57 AM Server (101) Configuration loaded The operation completed successfully	
🔛 Configuration	(257) 6/22/2016 2:29:41 PM Server (101) Configuration loaded The operation completed successfully	
Events 8. Actions	(256) 6/22/2016 2:29:26 PM Server (101) Configuration loaded The operation completed successfully	
ST Monitoring	(251) 6/22/2016 2:23:26 PM Server (101) Configuration loaded The operation completed successfully	
- Montoning	(249) 6/22/2016 2:19:24 PM Server (101) Configuration loaded The operation completed successfully	
🛄 Audit	(245) 6/22/2016 2:18:24 PM Server (101) Configuration loaded The operation completed successfully	
	(244) 6/22/2016 2:16:24 PM Server (101) Configuration loaded The operation completed successfully	~

Log Entries

Events are organized in a way similar to the Windows Event log, and can be filtered and sorted by any field. By default, entries are sorted by time, with latest on top.

Each event contains the following values (internal ID fields omitted):

- Time: event timestamp in system locale-specific format
- Class, Subclass and Event

- Server: internal server activity
 - Server activity: internal server activity
 - Config loaded
- User: action was taken by user via Ganz CORTROL Client
 - Authorized
 - Logout: Ganz CORTROL Client disconnected
 - Accessed Device
 - *Receive Data:* stream received
 - Administered Device
 - Administer
- Object Name
 - User name or server ID
- Target Name
 - Target device name





<u>Server</u>

Audit option Server is related to audit filters as they relate to the available CORTROL servers.

Define Filter: Audit log entries can be filtered for easier analysis. Click the *Define filter* button on the upper panel to bring up the dialog box.

Set period

Date and time can be set manually, or automated controls for preset time boundaries can be used. Start and end boundaries may also be used separately.

In the Set period tab, specify the time limits for log output:

- All time
- Last day
- Last week
- Last month

I Filter		_ □ ×
Filter	Set period	
Set period	Set avery period	
Select events	Secquery period	
Select resources	All time	From date and time 6/23/2016 v 11:15:53 AM
	Last day	Fram beginning
	Last week	To date and time
	Last month	6/23/2016 V 11:31:21 AM C Description Until now Ends query when timestamp submitted
Reset query		Submit query Cancel

Select events

In the Select events tab, choose specific event sources, groups and types to narrow down the search.

- Central server connected
- Central server disconnected
- Configuration loaded
- Failover status changed

🔤 Filter	X
Filter	Select events
Set period	
🗲 Select events	Select events
🔿 Sala at management	EVENTS
Select resources	Central server connected
	Central server disconnected
	Configuration loaded
	☑ Failover status changed
	Clear
Reset query	Submit query Cancel





Select resources

In the *Select resources* tab, the specific resources needing to be mentioned can be selected in the log entries. Note that if multiple resources are chosen, the filter will apply *OR* logic, meaning that output log entry will only be displayed if it contains **at least one** resource; it will **not** have to contain all of them.

Search query: Use the *Search* field to filter the resource list. Both the list of *Resources in query* and general *All resources* will be affected by the *Search* filter. Press the *Reset query* button in the bottom left corner at any time to restart filter configuration. When finished, click *Submit query* to view the results.

ilter	Select resources				C
Set period	Resources in query		All resources		
🗲 Select events	TITLE	ID TYPE	TITLE	ID TVPE	
Select resources	Server 😂	(101) Server	🔷 🎎 Guards	(104) User group	
	💄 Brian	(106) User	👪 Managers	(105) User group	
	L Built-in Administrator	(1) User	X 3MP PTZ	(115) Channel	
	💄 John doe	(122) User	ZN8-F7NTFN10L	(119) Channel	
	👪 Built-in Administrator	(3) User group	🗸 🔀 ZN-B6DMP55HE	(117) Channel	
	Remove		Add		

<u>Users</u>

Audit option Users is related to audit filters as they relate to the available CORTROL users.

Define Filter: Audit log entries can be filtered for easier analysis. Click the *Define filter* button on the upper panel to bring up the dialog box.

Set period

Date and time can be set manually, or automated controls for preset time boundaries can be used. Start and end boundaries may also be used separately.

In the *Set period* tab, specify the time limits for log output.

- All time
- Last day
- Last week
- Last month







Select events

In the *Select events* tab, choose specific event sources, groups, and types to narrow down the search.

- Log in
- Log out
- Administer
- Navigate
- Receive Data
- Unsuccessful log in

ilter	Select events	
Set period		
Select events	Select events	
Select recourses	EVENTS	
Select resources	Log in	
	Log out	
	Administer	
	Navigate	
	Receive Data	
	Unsuccessful log in	
	Clear	
Deset minut	Cubmit	Canal

Select resources

In the *Select resources* tab, the specific resources needing to be mentioned can be selected in the log entries. Note that if multiple resources are chosen, the filter will apply *OR* logic, meaning that output log entry will only be displayed if it contains **at least one** resource; it will **not** have to contain all of them.

Search query

Use the Search field to filter the resource list. Both the list of Resources in query and general All resources will be

affected by the *Search* filter. Press the *Reset query* button in the bottom left corner at any time to restart filter configuration. When finished, click *Submit query* to view the results.

ilter	Select resources						
Set period	Resources in query			A	ll resources		
Select events	TITLE	ID	TYPE		TITLE	ID	TYPE
Select resources	Server	(101)	Server	24	3MP PTZ	(115)	Channel
	💄 Brian	(106)	User	2\$	ZN8-F7NTFN10L	(119)	Channel
	💄 Built-in Administra	(1)	User	24	ZN-B6DMP55HE	(117)	Channel
	💄 John doe	(122)	User	2\$	ZN-DT2MTP-IR	(108)	Channel
	👪 Built-in Administra	(3)	User group	22	Outdoor Channels	(120)	Channel group
	👪 Guards	(104)	User group		3MP PTZ	(114)	Device
	👪 Managers	(105)	User group		ZN8-F7NTFN10L	(118)	Device
	Remove				Add		-A -





8. Problem Report Wizard

CORTROL offers a comprehensive wizard-like tool for structured and detailed problem reporting. The tool is automatically installed at the same time as the product and is thus available on any machine on which CORTROL is installed.

To access the Problem Report Wizard:

- Windows 8 and newer: use Start -> All Apps -> CBC AMERICAS, Corp. -> Problem Report Wizard
- Windows 7 and older: use Start -> All Programs -> software installation folder -> Tools -> Problem Report Wizard
- Alternatively, use Windows Start Menu *Search* to locate the Problem Report Wizard in the programs menu.

Make sure to run the Problem Report Wizard on the correct computer. It gathers information from the machine it has been launched on, and **not** from any of the servers connected via Ganz CORTROL Console or Ganz CORTROL Client.

Agree to deliver system files to CBC AMERICAS, Corp. support and click *Next*. You can check which files are being taken from your system by clicking on the information button next to the agreement checkbox.

Note that CBC AMERICAS, Corp. will not transfer your data to any third-party companies. All of the information gathered is required to help CBC AMERICAS, Corp. efficiently resolve the reported problems.

A We	Ganz CORTROL Problem Report Wizard – X	List of files	\times
	Surger CORTROL Witzard will guide you through the steps required to submit a problem report to technical support, to use bable to provide your comment, and the witzard will gather relevant information and attach to the report. Image: Step 1. User contact information menula address to neelwe leedback from technical support. Image: Step 2. Problem description Takes surgering the surgering to the description with test. Image: Step 3. Gathering system information and sending data calculate or description gates Image: Step 3. Gathering system information and sending data Image: Step 3. Gathering system information and sending data	 MS Windows System, Application and VMS Event logs. Device Manager hardware information. List of installed VMS files including file size and version. VMS log file located in ProgramData folder. VMS Configuration and Audit databases. List of configured cameras. System resource usage statistics. VMS archive index and status. VMS registry keys. VMS License file. 	
	flack Next Cancel	Ok	

Enter your name and your email address so that the CBC AMERICAS, Corp. support team can contact you. Click *Next* to proceed.

Username ar	ıd valid email a	ddress					
Solutions or i provided. It is	instructions to p highly recomme	oroblems descr ended that you	bed in proble use a valid en	em reports v nail address.	vill be sent	to the email	address
UserName							
Email address							





If you are applying a new, unreferenced problem report, click the *Add problem description* button. A short comprehensive wizard will guide you through the main issue categories, allowing you to choose the issues that are most applicable to your situation. You will be given the chance to enter error messages/codes and to attach snapshot(s) as needed. Make sure to provide the maximum amount of relevant information about the issue being experienced, and always include **snapshots** if they are available.

Pi	roblem description X		
	General problem source Please cpecify problem general source or select Custom option to describe problem with plain text. O Client O Server Streaming Server C Custom (describe problem in free form text)	LUTION	
Ad a pr	Back Next Cancel	y provid	ed

If you were asked by support team to generate a problem report, copy the **ticket ID** from the email communication and add it to the report by clicking the *Problem description already provided* button. This will help the support team to classify your report faster, and it will also guarantee that your report will go directly to the team member responsible for the thread.

A	Ganz CORTROL Problem Report Wizard – X
Step 2 of 3. Problen	n description
roblem descriptions	
PROBLEM	STEPS TO REPRODUCE FOUND SOLUTION
	Add support ticket number
	Please specify support ticket number assigned to your support request. Support ticket number
	Add Cancel
Add problem descri	Problem description already provided
	Back Send report Cancel





Multiple descriptions may be added to a single problem report. When ready, press the *Send report* button. The wizard will then try to send the report automatically.

If the server is offline, the wizard will not be able to submit the report to CBC AMERICAS, Corp.; instead, the software will prompt to save the generated report locally. Press the *Finalize (SIC in software) wizard without upload* button to finish.

A	Ganz CORTROL Problem Report Wizard —	×
Step	3 of 3. Gathering system information and sending data	
	Finalising the wizard	
	The submission is in progress. The wizard is trying to contact the website. Please wait: this could take some time. Once the request has been completed, the wizard will take you to the next page. To abort the sumbission, click Cancel.	
	\mathcal{O}	
	Gathering system information	
	•••••	
	Can	cel

Click *Save report as file* to save the compressed report onto the computer. The report may also be sent manually from any other computer to cortrol@cbcamerica.com. Click *Exit* to close the wizard.







9. COTROL Quiz (Open book)

- 1. What is the default username and password to log in as an Administrator to Windows?
 - a. root / pass
 - b. admin / admin
 - c. ADMIN / 1234
 - d. admin / "No password"
- 2. How many IP camera licenses are included when installing CORTROL Prime?
 - a. None
 - b. 4
 - c. 8
 - d. 16
- 3. What Operating System will run the CORTROL client?
 - a. Windows XP and higher
 - b. Linux
 - c. Mac OS X
 - d. All of the above
- 4. What is the resolution limit of CORTROL Prime?
 - a. 720p
 - b. 1080p
 - c. 4K
 - d. 8K

5. What port does the CORTROL Server use to communicate with the CORTROL Client?

- a. 80
- b. 8080
- c. 554
- d. 60554
- 6. What is the default username and password to initially log in as an Administrator to CORTROL?
 - a. root / pass
 - b. admin / admin
 - c. ADMIN / 1234
 - d. admin / "No password"
- 7. How is a device defined within CORTROL?
 - a. "Device" refers to any actual video stream delivered to the server.
 - b. "Device" profiles allow users to set how data streams are recorded.
 - c. "Device" refers to any piece of physical equipment that serves as a data provider.
- 8. How is a channel defined within CORTROL?
 - a. "Channel" refers to any actual video stream delivered to the server.
 - b. "Channel" profiles allow users to set how data streams are recorded.
 - c. "Channel" refers to any piece of physical equipment that serves as a data provider.





- 9. How is a recording profile defined within CORTROL?
 - a. "Recording profiles" refers to any actual video stream delivered to the server.
 - b. "Recording profiles" allow users to set how data streams are recorded.
 - c. "Recording profiles" refers to any piece of physical equipment that serves as a data provider.
- 10. What is highly recommended once you complete the setup and configuration of the CORTROL system?
 - a. Back up the settings by exporting the settings and the license key from the system.
 - b. Search for recorded video from the cameras to verify that the motion detection is working.
 - c. Verify that all of the steps from the installation checklist have been completed.
 - d. All of the above
- 11. Regarding software such as Anti-virus, defragmentation, and scandisk, what is the rule of thumb?
 - a. Configure to scan all available media.
 - b. Configure to run on the C: drive and data drive(s).
 - c. Configure to run on only the C: drive.
 - d. Configure to run on only the data drive(s).
- 12. What is the advantage of the member's function in CORTROL?
 - a. Allows the addition of a device, channel, or user to a grouping.
 - b. Allows the addition of a device, channel, or user to profile.
 - c. Allows the addition of a device, channel, or user to a server.
- 13. For software motion detection in CORTROL which is more CPU intensive?
 - a. Software (High Accuracy)
 - b. Software (High Performance)
- 14. In CORTROL, the main stream and sub stream must record to the same storage device.
 - a. True
 - b. False
- 15. CORTROL allows monitoring Servers, Devices, Channels, and User sessions.
 - a. True
 - b. False
- 16. In order to request an evaluation license for CORTROL
 - a. Request one through the mobile app.
 - b. Request one during the installation.
 - c. Request one from <u>www.ganzsecurity.com.</u>
 - d. COTROL does not offer an evaluation license.





Page left blank on purpose





10. Course Evaluation

Please indicate your impressions of the items listed below.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The training met my expectations.					
The content was organized and easy to follow.					
The materials were pertinent and useful.					
The quality of instruction was good.					
There was adequate time for questions and discussion.					
Comments:					

Indicate your level of preparedness to complete the following tasks.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Following the System Evaluation Checklist to configure a Ganz CORTROL System.					
Install a client on another computer, making sure it can connect to the server with the expected IP address and one of the user accounts that was set up.					
Display cameras in the layout panels using both the drag and drop and double clicking methods.					
Conduct a video and audio search using the interface to control playback.					
Export video to a USB thumb drive, and or host client location.					
Use the online Help System.					
Troubleshooting basic support issues.					
Comments:		<u>.</u>			

	Excellent	Good	Average	Poor
How do you rate the training overall?				
Comments:				

What aspects of the training could be improved?

100



Comments:

11. Check List – CORTROL Setup

	Quick Start							
	Installation							
	See Quick Start Guide for information on installing the hardware.							
	Establishing Initial Communications							
	See Quick Start Guide for information on establishing communications from the CORTROL client to CORTROL Server.							
	Configure IP Cameras							
	See IP Camera Quick Start Guide for information on configuring IP camera addresses, usernames, and passwords.							
	Config (Setup)							
	System							
	Configure the CORTROL Recording Server's system name, time, time zone, and Static IP address.							
	Storage							
	Ensure all disks are selected for recording except the system drive, C:\ in Windows.							
	Ensure total disk space matches the expected value.							
	Add IP Cameras							
	Network cameras IP address are configured, and added to the Ganz CORTROL Recording Server.							
	Camera Recording (IP cameras)							
	Set resolutions: Group1 Group2 Group3 Group4 Group5							
	Set frame rate: Group1 Group2 Group3 Group4 Group5							
	Camera Recording (analog cameras)							
	Set resolutions: Group1 Group2 Group3 Group4 Group5							
	Set frame rates: Group1 Group2 Group3 Group4 Group5							
	Disable cameras that are not connected.							
	Camera Settings							
	Name camera.							
	Enable onscreen display.							
	Set motion mask on IP cameras (typically no motion mask set on a new camera, motion recording won't trigger.)							
	Mask motion from irrelevant objects such as moving trees, ceiling fans.							
	Create Layouts for relevant locations, such as doors and hallways.							
	Configure quality/bit rate setting just high enough to see relevant details.							
	If supported by the cameras, set secondary stream, for use in multi-live view screen arrangements.							
	Watch for motion blocks in live to ensure that motion sensitivity and masking are appropriately configured.							
	Configure mechanical PTZ presets.							
	Schedule							
	No recorded is assigned by default. Change any cameras to continuously record or motion recording as needed.							
	Audio is not recorded by default. Schedule audio recording if necessary.							





Image: series of the series of the people who will use the system. Image: series of the people who the series who the series of the people who the series		Configure, schedule event notifications if necessary.				
Users Add user accounts for the people who will use the system. Trigger Input Name input triggers to be used. Set radio button to normally open or closed to match physical switch. Alarm Output Name any alarm outputs to be used. Create email profile for system health administrator. Create email profile for security events such as unexpected motion or input triggers. Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking						
UsersAd user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the people who will use the system.Image: Add user accounts for the system.Image: Add						
Add user accounts for the people who will use the system. Image: Add user accounts for the people who will use the system. Image: Add user accounts for the people who will use the system. Image: Add user accounts for the people who will use the system. Image: Add user accounts for the people who will use the system. Image: Add user accounts for the people who will use the system. Image: Add user accounts for the people who will use the system. Image: Add user accounts for the used. Image: Alarm Output Name any alarm outputs to be used. Image: Alarm output stop be used. Image: Alarm output stop be used. Image: Create email profile for system health administrator. Image: Create email profile for system health administrator. Image: Create email profile for security events such as unexpected motion or input triggers. Image: Create email profile for the installer. Image: Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Image: Event Linking		Users				
Trigger InputImage: Input triggers to be used.Set radio button to normally open or closed to match physical switch.Image: Input triggers to be used.Image: Image: I		Add user accounts for the people who will use the system.				
Image: Name input triggers to be used. Set radio button to normally open or closed to match physical switch. Image: Alarm Output Name any alarm outputs to be used. Image: Alarm Output or closed to match physical switch. Image: Create email profile for system health administrator. Image: Create email profile for security events such as unexpected motion or input triggers. Image: Create email profile for the installer. Image: Export an archive clip Image: Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Trigger Input				
Set radio button to normally open or closed to match physical switch. Alarm Output Name any alarm outputs to be used. Create email profile for system health administrator. Create email profile for security events such as unexpected motion or input triggers. Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Name input triggers to be used.				
Alarm Output Name any alarm outputs to be used. Notifications Create email profile for system health administrator. Create email profile for security events such as unexpected motion or input triggers. Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Set radio button to normally open or closed to match physical switch.				
Image: Name any alarm outputs to be used. Notifications Create email profile for system health administrator. Create email profile for security events such as unexpected motion or input triggers. Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Alarm Output				
Notifications Create email profile for system health administrator. Create email profile for security events such as unexpected motion or input triggers. Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Name any alarm outputs to be used.				
Create email profile for system health administrator. Create email profile for security events such as unexpected motion or input triggers. Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Notifications				
Create email profile for security events such as unexpected motion or input triggers. Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Create email profile for system health administrator.				
Create email profile for the installer. Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Create email profile for security events such as unexpected motion or input triggers.				
Export an archive clip Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Create email profile for the installer.				
□ Archive a five-minute clip to confirm recording, and archiving. Insert blank CD / DVD / USB thumb drive. Event Linking		Export an archive clip				
Insert blank CD / DVD / USB thumb drive. Event Linking		Archive a five-minute clip to confirm recording, and archiving.				
Event Linking		Insert blank CD / DVD / USB thumb drive.				
		Event Linking				
Create events to alert administrator via email of system health issues.		Create events to alert administrator via email of system health issues.				
Create events to record video on input triggers.		Create events to record video on input triggers.				
Create events to email security administrator upon unexpected triggers or motion.		Create events to email security administrator upon unexpected triggers or motion.				
Create event to email installer when license subscription is near expiration.		Create event to email installer when license subscription is near expiration.				
Export Configuration Settings		Export Configuration Settings				
Save settings and license to a USB flash drive to aid the recovery process, if necessary.		Save settings and license to a USB flash drive to aid the recovery process, if necessary.				
Live Page		Live Page				
Live		Live				
Create views as required by users for live viewing or multi-camera search and playback.		Create views as required by users for live viewing or multi-camera search and playback.				
Install Client		Install Client				
Install the Ganz CORTROL Client on another computer and ensure that it can connect to the Ganz CORTROL		Install the Ganz CORTROL Client on another computer and ensure that it can connect to the Ganz CORTROL				
Recording Server using the static IP address and one of the configured user accounts.		Recording Server using the static IP address and one of the configured user accounts.				
Search Page		Search Page				
Search*		Search*				
Connect after 24 hours.		Connect after 24 hours.				
Connect after 7 days.		Connect after 7 days.				
*Search to ensure cameras are not recording excessive amounts of motion. If they are, adjust motion sensitivity or windows/masks, or possibly adjust camera for low-light noise. Look at Storage page and extrapolate the storage duration to ensure that it meets requirements. If it does not decrease frame rate quality or resolution		*Search to ensure cameras are not recording excessive amounts of motion. If they are, adjust motion sensitivity or windows/masks, or possibly adjust camera for low-light noise. Look at Storage page and extrapolate the storage duration to ensure that it meets requirements. If it does not decrease frame rate quality or resolution				
autation to ensure that it meets requirements. If it does not, decrease frame rate, quality, of resolution.						





12. CORTROL Technical Training – Notes 1





13. CORTROL Technical Training – Notes 2





