communication Networks



INSTALLATION AND OPERATION MANUAL



INDUSTRIAL ETHERNET PRODUCTS MANAGEMENT UTILITY SUITE

eConsole is ComNet's powerful software monitoring and diagnostic utility. eConsole includes three separate utilities **eCommander**, **eVision**, and **eMonitor**. With the eCommander application the user can set parameters for multiple switches at the same time and it provides a powerful interface for users to manage all switches in the network.

eConsole is not only a powerful utility for users to configure but also a useful suite of utilities for monitoring. Users can monitor switches' status via eMonitor. If the monitored switches fail, the failure information will be displayed on the Host monitoring interface.

The eVision application provides a real time overview of the entire network for visual fault indication and full monitoring capabilities for SNMP based traps.

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Introduction

Regulatory Compliance Statement

Product(s) associated with this publication complies/comply with all applicable regulations. Please refer to the Technical Specifications section for more details.

Warranty

ComNet warrants that all ComNet products are free from defects in material and workmanship for a specified warranty period from the invoice date for the life of the installation. ComNet will repair or replace products found by ComNet to be defective within this warranty period, with shipment expenses apportioned by ComNet and the distributor. This warranty does not cover product modifications or repairs done by persons other than ComNet-approved personnel, and this warranty does not apply to ComNet products that are misused, abused, improperly installed, or damaged by accidents.

Please refer to the Technical Specifications section for the actual warranty period(s) of the product(s) associated with this publication.

Disclaimer

Information in this publication is intended to be accurate. ComNet shall not be responsible for its use or infringements on third-parties as a result of its use. There may occasionally be unintentional errors on this publication. ComNet reserves the right to revise the contents of this publication without notice.

System Requirements

Minimum System Requirements

- » Pentium(R) Dual-core 2.4 (or above)
- » VGA Monitor with 1024 x 768 resolution (or above)
- » 1 GB RAM (recommended 2GB and above)
- » Java Runtime Environment 6 update 30 (or above)
- » Internet Explorer 6.0 (or above)
- » WinPcap 4.0 (or above)

Supported Network Protocols

- » TCP / IP
- » UDP
- » SNMP

Operating System

- » Windows 8
- » Windows 7
- » Windows Vista
- » Windows XP/2000
- » Windows Server 2008
- » Windows Server 2003

Note: Please make sure your computer has Java Runtime Environment installed (if not, the installer will ask if you would like to install it. You can also download the latest version of Java Runtime Environment (JRE) 7 from SUN at http://java.com/en/download/)

Install eConsole

Please see the following instructions to install the eConsole software

Step 1 - Obtain the latest copy of eConsole from the product information CD that accompanied your switch or by visiting the website at www.comnet.net

eConsole ComNet ×	+								n.
(Swww.comnet.net/comnet-products/ether	net/managed-switches/econsole.html	ତ ⊽ ୯ ପି 🖉 ▼ Google	٩	俞	☆	Ô	13	=	-
ECOM FIGENOPIC, ETHER CONDECTIVITY HOME INNOVATION Go-Geor Initiative Nors & Events ITS Multi-antiti	Product Search Voteo Data Audo Cont Coppertun ⁴⁶⁰ ComPak SEP Modules C ECONDOLE	Google Translation of ComMetLet Inte Google Translation of ComMetLet Int Search here. act. Ethermet ^{NEW} Wirelest ^{NEW} Accessories ValueLine ables							
Government Markets Gaming Markets Electric PT&D Industral Automation Gareers SUPPORT Teen Support Design Center Customer Care RESOURCES Motole App Training Product Literature Architect & Engineer Project References		Available Product Documentation:							
PRODUCTS Product Search Vision Otata Austo Contact Ethromotics Weineless ¹⁰⁰⁰ Accessories	ComNet [®] eConsole is a powerful Network M can meet various demands for network mori Utilizing three key functions – Centralized M eConsole suite provides advanced monitoring accidenta situations in the local network and re APPLICATION DIAGRAM SCREEN SUCTS	anagement Software suite including three powerful applicati toring and management in a wide range of industrial appli management, Visualized Management, and Device Monitorin teatures and visuous warning systems, users can be informe scover the network immediately.	ons tha cations g - th d of an	at s. e Y					

eConsole Product Page on ComNet's Website

Step 2 - Click on the eConsole EXE file to start the installation.

33% Preparing Setup - Please wait ×

Step 3 - Click **Next** to install eConsole in the default directory or click **Change** to change the path of installation. Then click **Next** to continue.



Step 4 - Accept the terms & conditions to continue with the install and click **Next** to continue.



Step 5 - The software will now be installed.



After the software has been installed new windows will pop up asking the user to install Java runtime environment 7 update 51 and WinPcap 4.1.3 which are requirements for eConsole to run properly. You can skip these installations if both of these programs are already installed on your machine.

Step 6 - Once the software installations have been completed a confirmation window will be displayed. Click **Ok** to complete the install procedure.



After the installation is completed, shortcuts will be placed in the Start Menu in the following location: Start > All Programs > ComNet > eConsole



Configuring PC Network Interface Card

Please set the PC's IP address and subnet mask to the same subnet as the switches that you wish to connect to.

Internet Protocol Version	4 (TCP/IPv4) Properties			
General				
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.	matically if your network supports ask your network administrator			
Obtain an IP address automatical	ly			
• Use the following IP address:				
IP address:	192 . 168 . 10 . 100			
Subnet mask:	255.255.255.0			
Default gateway:				
Obtain DNS server address automatically				
• Use the following DNS server add	resses:			
Preferred DNS server:	•			
Alternate DNS server:	· · ·			
Validate settings upon exit	Advanced			
	OK Cancel			

If there are switches in different subnets the user will need to add in all subnets into the NIC using the **Advanced** menu option.

eCommander



eCommander can be used to discover and configure all ComNet second generation switches on the network. It also includes some useful wizards for fast switch configuration.

Note: Not all switches are compatible with eCommander. For a complete list of compatible ComNet switch models please refer to the latest eConsole data sheet at www.comnet.net.

Discovery

The user can discover all the switches within the NIC subnet by simply clicking on the **Discovery** button.



Discovery Filter

In order to manage and discover switches in a different domain, the user can use the **Discovery Filter** to search and add the switches.



Note: The gateway of the PC must be the Router.

Step 1 - Click the **Discovery Filter** button.



Step 2 - In the **Remote** section, enter the first remote IP and end remote IP range you need.

Click the **+** button to add in the IP range. A different subnet can also be added if needed. Then click the **OK** button.

Set Discovery Filter			
Interface selection			
C Local Subnets			
Address: Broadcast all interface			
Remote IP A <u>d</u> dress: 192.168.168.20			
or to range: 192.168.168.23			
Destination			
192.168.168.20			
192.168.168.22			
192.168.168.23			

The switches will be found and added into the device list of eCommander.

\$					
Task Settings	Help				
Q	∇	8	8	1	P
Discovery Di	scovery Filter	Login all	Logout all	Auto Logout	Reboot
<u>S</u> ort Devices By:	Model	•			
	ander				
	/ICes (4)				
		PUEZ	n at an		
	192.168.10	.4 (00:22:3	B:0A:07		
	CNGE8MS				
	192.168.10	.5 (00:22:3	B:0A:01		
En ∎	CWGE28FX4T>	K24MS			
	192.168.10	.3 (00:22:3	B:0A:19		
	CWGE26FX2T>	X24MSPOE	Ξ		
	192.168.1.2	251 (00:22:	3B:0A:0		
🚽 🔤 Stat	tus Monitor				

ECONSOLE

Task Menu

	Task Settings Help
	Q Discovery Ctrl+F Image: Ctrl+F
Label	Description
Discovery	Click Discovery to discover the switches on the same subnet as the PC. eCommander will display all discovered switches on the management interface. eCommander discovers switches depending on the discovery filter.
	Note: All switches can have the same IP address such as when they are delivered from the factory. eCommander can discover and change the IP addresses by the Group IP Setting function.
Discovery Filter	 Local: eCommander will only discover all switches that are in the same specific IP subnet of NIC that the user selects. Remote: users are able to use specific IP address ranges to discover switches on different subnets.
Login all	eCommander can login to multiple switches that the user has selected. After login, the switch icon will change from to to
	Note: By default, eCommander will logout of all switches automatically after being idle for 300 seconds.
Logout all	eCommander can logout from multiple switches that the user has selected. After logour success, the switch icon will change from to to.
Reboot	eCommander can reboot multiple switches that the user has selected. When the user clicks reboot, a dialog window will be displayed on screen to confirm.
Open Web	eCommander will open the default browser of your OS automatically and navigate to the selected switches web GUI.
Refresh	Refresh the specific switches management interface and switch configuration interface.
Refresh All	Refresh all switches management interfaces and switch configuration interfaces.
Clear state	User can clear the device icon status.

Settings Menu

-65a							
Task Settings Help							
Task Settings Trop							
Ctrl+O	L	8				R	Para
🕼 Import Device Ctrl+l	ы	Locout all		Beboot	Open Web	Befresh	°∰ Befresh ∆ll
Save Device Ctrl+S	-	Logoaran	Auto Eogoat	TICDOOL	open web	ricinean	Honostrai
Save Default Device Ctrl+A							
🛠 System Config	F						
Devices							
Status Monitor							
🚽 🖳 🟹 Scan Devices Configurati	on						
- 🔛 Syslog Events							
🗄 🔍 Wizards							
🧈 🌮 Group IP Setting							
🥠 Group Eirmware Unda	te l						
Croup Continuation P	nel:						
	ack.	up					
Group Configuration F	esto	ore					
Group Redundant Rin	g Se	etting					

Label	Description
Load Device	Users are able to re-load the IP address list (The old list will be cleared).
Import Device	Users are able to re-load the IP address list (The old list will remain and any new devices will be added).
Save Device	Users are able to save the IP address list on the Discovery Filter/Remote page.
Save Default Device	Users can save the device list as a default. On future starts eCommander will display the devices directly, without re-discovery.
	<i>Note: to use this function you must have enabled</i> System Config menu > Load default device when start commander.
System Config	 Auto Logout time : Change the timer of the Auto logout. Syslog server : Enable or disable eCommander's built-in syslog server. Load default device when start commander : When eCommander starts it will automatically read the last used device information
	Note: to use this function you must also use the Settings menu > Save Default Device option.
	Start minimize to system tray: Minimize the eCommander to the windows taskbar when the eCommander is first started.
	Run at Windows startup: Enable to run eCommander automatically at Windows startup Discover new devices without clearing device list: Enable to discover new devices without clearing previous devices in the device list. State Banner: Enable to display the switch's port state.

Help

Label	Description
About	Display eCommander version and build information.

Icons Introduction

The most commonly used functions are provided in the main icon bar so the user can use these function directly without the need to find them in menus.

lcon	Description
Q Discovery	Please refer to Task Menu section
Discovery Filter	Please refer to Task Menu section
all Login all	Please refer to Task Menu section
Cogout all	Please refer to Task Menu section
Auto Logout	eCommander will logout of the device automatically
Reboot	Please refer to Task Menu section
Open Web	Please refer to Task Menu section
eresh	Please refer to Task Menu section
Refresh All	Please refer to Task Menu section
Group IP Wizard	eCommander Group IP Wizard can configure the IP Address of multiple switches. The function will be introduced in more detail in the eCommader Wizards section.
Group Firmware Wizard	eCommander Group Firmware Wizard can update the firmware of multiple switches. The function will be introduced in more detail in the eCommader Wizards section.
5 Group Redundant Ring Wizard	eCommander Group Redundant Ring Wizard can set the C-Ring function of multiple switches. The function will be introduced in more detail in the eCommader Wizards section.
습습 습습 About	Please refer to the Help Menu section.

Devices list

All compatible switches discovered will be added into the device list and also the total devices searched. The user can start managing the switch by clicking on the switch and logging in.



LED and Port Status

Users are able to get the switches LED and port status information by this simple interface.





Status Monitor

The Status Monitor provides an interface for the user to monitor the switches in the network. Any disconnected switches will be marked and also the alarm will sound.

Query <u>P</u> e	riod: 4	sec			
Query <u>T</u> in	neout: 5	sec			
<u>B</u> eep Ala	m: 🔽				
<mark>▼</mark> <u>S</u> our	nd filename defined b	iy user			
C:\Progra	am Files (x86)\ComNe	et\eConsole\beep.wav			
0	pen		🍫 Redetect The Replac	ed Error Devices	te Selected Devices 🛛 🧼 <u>R</u> efresh
	IP	MAC Address	Model	Last Reported Time	Status
1	192.168.10.4	00:22:3B:0A:07:24	CNGE2FE8MSPOE2	04/08/2014 15:33:55	Online
X2	192.168.10.5	00:22:3B:0A:01:42	CNGE8MS	04/08/2014 15:32:58	Offline
H 3	192.168.10.3	00:22:3B:0A:19:23	CWGE28FX4TX24MS	04/08/2014 15:33:55	Online
14 4	192.168.1.251	00:22:3B:0A:0E:82	CWGE26FX2TX24MSPOE	04/08/2014 15:33:55	Online

Label	Description
Query Period	Timer to query for switch status.
Query Timeout	Device will be considered as in error after query timeout
Beep Alarm	Enable/disable the beep alarm after a device fails
Sound filename defined by user	Enables the user to customize the alarm sound.
Redetect the replaced error devices	Redetect the error device without waiting for the query period timer
Delete Selected Devices	Remove the selected device from the list
Refresh	Refresh the device status.

Scan Devices Configuration

The Scan Devices Configuration can scan and compare the configuration on the devices compared to the backup configuration on the PC to check whether the configuration on the device is different.

Note: The naming format of the backup configuration must be (Model)_(Kernel Ver)_(Firmware Ver)_(IP).xml or .bin (depending on switch backup file type supported). For example: CWGE28FX4TX24MS_v7.12_v1.01_192.168.10.3.xml. Or the user can use the Group Configuration Backup to save the backup file with the correct default file name.

C:\Backup						C Source Directory
🔲 Auto Scan						
C Every hour						
C Every day	PM 11:00	A				
Last Scan Time: 0-	4/08/2014 15:55	:49				🔍 Scan Now
Model	System Name	Kernel Ver.	Firmware	IP Address	Status	Filename
X CNGE2FE8M		v2.49	v1.07	192.168.10.4	No Match File	No Match File
X CNGE8MS		v2.49	v1.09	192.168.10.5	No Match File	No Match File
V CWGE28FX4		v7.12	v1.01	192.168.10.3	The Same	CWGE28FX4TX24MS_v7.12_v1.01_192.168.10.3.xml
X CWGE26FX2		v9.00	v1.02	192.168.1.251	No Match File	No Match File
1						

Label	Description
Source Directory	Select the directory of backup configuration(s)
Auto Scan	Enable Auto Scan
Every hour	Scan every hour
Every day	Scan everyday on certain time
Scan Now	Scan configuration immediately

Syslog Events

The built in Syslog server allows the user to check and save the events of the switches automatically.

lum events	: 16							📊 Save 🛛 🗽 Clear
Auto Sa	ave							
hreshold N	lum 1000 韋	🗁 Ope	en Saved File					
Event ID	Facility	Severity	Host	Date	Time	Port	Link State	Messages
Q1	user-level messa	Notice	192.168.10.4	04/08/2014	16:04:39			admin:G2 : Link Down!
Q 2	user-level messa	Notice	192.168.10.5	04/08/2014	16:04:39	Port.07	Link Down	admin:Port.07: Link Down!
Ф з	user-level messa	Notice	192.168.10.4	04/08/2014	16:04:51			admin:G2 : Link Up!
€4	user-level messa	Notice	192.168.10.5	04/08/2014	16:04:51	Port.07	Link Up	admin:Port.07: Link Up!
٩5 🔇	user-level messa	Notice	192.168.10.6	04/08/2014	16:05:01	Port.02	Link Down	admin:Port.02: Link Down!
i)6	user-level messa	Notice	192.168.10.5	04/08/2014	16:05:02	Port.08	Link Down	admin:Port.08: Link Down!
Q 7	user-level messa	Notice	192.168.10.6	04/08/2014	16:05:12	Port.02	Link Up	admin:Port.02: Link Up!
₽8	user-level messa	Notice	192.168.10.5	04/08/2014	16:05:12	Port.08	Link Up	admin:Port.08: Link Up!
۹ 🗘	user-level messa	Notice	192.168.10.5	04/08/2014	16:05:25	Port.07	Link Down	admin:Port.07: Link Down!
l 10	user-level messa	Notice	192.168.10.3	04/08/2014	16:05:26	PORT 23	Link Down	admin:PORT 23 Link Down.
11	user-level messa	Notice	192.168.10.5	04/08/2014	16:05:39	Port.07	Link Up	admin:Port.07: Link Up!
12	user-level messa	Notice	192.168.10.3	04/08/2014	16:05:41	PORT 23	Link Up	admin:PORT 23 Link Up.
् 13	user-level messa	Notice	192.168.10.4	04/08/2014	16:05:43			admin:Device restart!
ال	user-level messa	Notice	192.168.10.4	04/08/2014	16:05:43			admin:Power1 on

Label	Description
Save	Save system log info to an Excel file.
Clear	Clear existing system log.
Auto Save	Enable auto save of the event log when the below threshold is reached.
Threshold num	Save the events when the number of messages reach this value.
Open saved file	Open a saved log.

Wizards

The wizards allow the user to do some basic settings on multiple devices at one time e.g. Set IP Addresses, C-ring setting... etc.

Group IP Setting Wizard

The Group IP Setting Wizard allows the user to set the IP address of all devices in the list in just a few steps.

STEP 1 - Select one or more devices to be configured.

Select one or more	roup IP	Setting Wizard						
Model	MAC	IP		1	Model	MAC	IP	
CWGE26FX2TX24MSPOE	00-22:38:0A:0E:82	192.168.1.251			CWGE28FX4TX24MS CNGE8MS CNGE2FE8MSPOE2	00.22:38:0A:19:23 00:22:38:0A:01:42 00:22:38:0A:07:24	192.168.10.1 192.168.10.1 192.168.10.1 192.168.10.1	
				- 1				
<			>		<)
						4	Prev 🖨	Next

STEP 2 - Configure the IP address range or DHCP server IP address.

You can change the order of the switches to define which one is given which IP address by using the arrow buttons on the right hand side.

Group	p IP Settin	g Wizar	ď		
Conliguie the in address fai		HAC	Original UD	Nam ID	
Direr clork	CWGE29EV4TV24MS	00-22-38-0A-19-23	192169101	192169103	
	CNGE2FE8MSPDE2	00:22:3B:0A:07:24	192.168.10.1	192.168.10.4	
IP <u>B</u> ange:	CNGE8MS	00:22:3B:0A:01:42	192.168.10.1	192.168.10.5	
IP Begin: 192.168.10.3					
IP End: 192.168.10.5	1				<u></u>
Netmask: 255.255.255.0					л
Gateway: 192.168.10.254					-
					<u>₽</u>
				Save Griet G Pre-	v Applu

STEP 3 - Apply to finish the configuration.

Grou	ıp IP Settin	g Wizar	d		
Configure the IP address r	ange or DHCP IP				
C DHCP Client	Model	MAC	Original IP	New IP	
	✓ CWGE28FX4TX24MS	00:22:3B:0A:19:23	192.168.10.3	192.168.10.3	
C 100	✓ CNGE2FE8MSPOE2	00:22:3B:0A:07:24	192.168.10.4	192.168.10.4	
(• IP Hange:	V CNGE8MS	00:22:3B:0A:01:42	192.168.10.5	192.168.10.5	
IP Begin: 192.168.10.3					
IP End: 192.168.10.5					<u>Û</u>
Netmask: 255.255.255.0	-				л
Gateway 192 168 10 254	-				_
datanay. procine in the					4
				🔚 Save 🗳 Eirst 🖨 Prev	Apply

Group Firmware Update Wizard

This Group Firmware update allow the user to update a group of switches (with the same model number only) at one time. This allows the user to save time doing the update manually one by one.

STEP 1 - Select one or more devices (must be the same model) to be configured.

oloct one or mo	ro dovicor	to bo confi	gurod							
Model	Kernel Ver	Firmware Ver	ушец. Гмаг	IP		Model	Ker	Firm	MAC	LIP.
INGE2FE8MSPDE2	v2.49	v1.07	00:22:3B:0A:07:24	192.168.10.4	_	110001	100111	1 1 1112.2	11110	
NGE8MS	v2.49	v1.08	00:22:3B:0A:01:42	192.168.10.5						
WGE28FX4TX24MS	v7.12	v1.01	00:22:3B:0A:19:23	192.168.10.3						
					امد					
					<2					
					I					
						-				

STEP 2 - Browse to select the new Firmware file to be upgraded.

🗭 Gr	oup	Firmw	are U	pdate	Wizaro	ł
Select the ungrade m	ethod lo	cal firmware in	nade			
 Use build-in support: 	culou, ic	Model	Kernel Ver.	Firmware Ver.	MAC	IP Address
	D	CNGE8MS	v2.49	v1.08	00:22:3B:0A:01:42	192.168.10.5
						Reboot 🗢 Prev 🖒 Upgr

- STEP 3 Click **Upgrade** to start the firmware upgrade process.
- Warning: Please ensure that you do not remove power to the switch while the upgrade process is in progress.

Group	Firmw	vare U	pdate	e Wizaro	ł	
Select the upgrade method, k	ocal firmware in	nage.				
 Use <u>build-in support</u>: 	Model	Kernel Ver.	Firmware Ver.	MAC	IP Address	
C:\Firmware\CNGE8MS\FW	CNGE8MS	v2.49	v1.08	00:22:38:0A:01:42	192.168.10.5	
	-					
	-					
	1					
					👚 Reboot 🛛 🗢 Prev 🗖	Upgrade

STEP: 4. After the upgrade process has completed, click **Reboot** to reboot all upgraded devices.

Sroup	Firmw	vare U	pdate	e Wizaro	ł
Select the upgrade method, lo	cal firmware in	nage.			
 Use build-in support: 	Model	Kernel Ver.	Firmware Ver.	MAC	IP Address
C:\Firmware\CNGE8MS\FW.	V CNGE8MS	v2.49	v1.08	00:22:3B:0A:01:42	192.168.10.5
					Reboot 🖉 Prev 🖨 Upgrade

Group Configuration Backup

This Group Configuration Backup allows the user to backup the configuration of multiple devices (with the same model number only) automatically.

STEP 1 - Select one or multiple devices to be backed up.

Ø	Grou	ıp Co	nfigura	tion E	lac	kup \	Wiz	zar	d	
Select one or mo	ore device	es to be con	figured.							
Model	Kernel Ver.	Firmware Ver.	MAC	IP		Model	Ker	Firm	MAC	IP
CNGE2FE8MSPOE2	v2.49	v1.07	00:22:3B:0A:07:24	192.168.10.4		CNGE8MS	v2.49	v1.09	00:22:3B:0A:01:42	192.168.10.5
CWGE28FX4TX24MS	v7.12	v1.01	00:22:3B:0A:19:23	192.168.10.3						
					52					
					4					
					-					
/										
`										
									🗢 <u>P</u> rev	Next

STEP 2 - Browse to the directory to save the backup configuration and click **Backup** to start the backup.

G	Group Configuration Backup Wizard							
Select the location t	to backup configura	ition.						
Use <u>b</u> uild-in support: C:\Backup	8							
Model	Kernel Ver.	Firmware Ver.	MAC	IP Address	Status			
CNGE8MS	v2.49	v1.09	00:22:38:04:01:42	192.168.10.5				
					🗢 Prev 🖨 Backup			

Group Configuration Restore

The Group Configuration Restore allows the user to restore the configuration of multiple devices (with the same model number only).

STEP 1 - Select one or multiple devices to be restored.

Select one or mo		as to be con	figured							
Model	Kernel Ver.	Firmware Ver.	MAC	IP		Model	Ker	Firm	MAC	IP
CNGE2FE8MSPOE2	v2.49	v1.07	00:22:3B:0A:07:24	192.168.10.4		CNGE8MS	v2.49	v1.09	00:22:3B:0A:01:42	192.168.10.5
_WGE28FX41X24M5	V7.12	VI.UI	UU:22:38:UA:19:23	192.168.10.3						
					4					
c				>						

STEP 2 - Browse to the backup configuration file to be restored or check the **Auto Filename Prefix** box to let the wizard detect the configuration file in the directory if it has been saved with the default naming structure.

Ø	Group	o Con	figuratio	on Resto	ore Wi	zard
 Use build-in support: 	n to restore	Configurati	ON. name Prefix:			
C:\Backup		(Model)_	(Kernel Ver)_(Firmware Ve	a)_(IP)		
Model	Kernel Ver.	Firmware Ver.	MAC	IP Address	Status	FileName
CNGE8MS	v2.49	v1.09	00:22:38:04:01:42	192.168.10.5		C:\Backup\CNGE8MS_v2.49_v1.09_192
-					Reboot	Prev Restore

Group Redundant Ring Setting

The Group Redundant Ring Setting allows user to configure ComNet C-Ring in multiple switches (with the same model number only and that are using the same port numbers as part of the ring) at one time.

Note: Different model number switches or for switches where the C-Ring port numbers are not the same must be configured in separate wizard sessions.

STEP 1 - Select one or multiple devices to be configured with C-Ring.

Ø	Redun	dant Ring	Wizard			
Model	MAC	le conligurea.		Model	MAC	IP
CNGE2FE8MSPOE2 CWGE28FX4TX24	00:22:38:04:07:24 00:22:38:04:19:23	192.168.10.4 192.168.10.3		CNGE8MS	00:22:3B:0A:01:42	192.168.10.5
			<u> </u>			
			<u>₽</u>			
			4			
			4			
2	,		>	<		
					4	∎ <u>P</u> rev

STEP 2 - Select the ports you are using as ring ports in the list and click on Apply.

Rec	dundant R	ing Wiza	rd		
Configure the ring ports	s of devices				
	Model	MAC	IP Address		
1st Ring Port: PORT.07	CNGE8MS	00:22:3B:0A:01:42	192.168.10.5		
2nd Ring Port PORT.08	-				
Coupling Port: NO USE	•				
Homing Port: NO USE	•				
				🔚 Save	🗢 Prev 🖨 Apply

eVision

Important Note

eVision monitors devices that support SNMP and LLDP. Both of these functions must be enabled on each device. On some ComNet devices these features may not be enabled by default. If the device you are looking for is not displayed or does not show any port links please check that the above features are enabled on the device.

The SNMP Read Community setting must be the same on all devices and must match the eVision SNMP Read setting in the System Config menu.

About eVision

eVision is a useful and powerful network topology utility. It is able to display the network topology automatically. The network administrators are able to monitor the network devices and links status via eVision immediately.

Topology Wizard

By default, the Topology wizard will pop up when eVision is started. Using the wizard the user can discover devices and group settings etc. The wizard startup can also be enable/disabld by selecting Edit > System Config > Initial Conf > Launch Wizard when system start from the Edit menu.

There are two options in the wizard, which are:

Label	Description
Detect Device	Start the steps to discover devices and group settings
Load an Existing Topology File	Load a backup Topology configuration file.

Please see the following steps for the **Topology Wizard - Detect Device** option.

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INSTALLATION AND OPERATION MANUAL

Step 1 - User can enter an IP range which allow it to scan for devices automatically, or user can also add a device manually by using its known IP address by clicking **Add**.

<u>چ</u>	Wizard Dialog	×
	TOPOLOGY XIEW	
IP Address	Add	
	Delete	
	Clear All	
	Help	
Detect device	e setting	
192.168.10	0.1 to 192.168.10.254 Start Stop	
	Kext Back Next X Can	cel

Step 2 - Select **Manage Group of Device** for the Group setting or skip by selecting **Set it up later** (if you select Set it up later, please go to Step 4).

9	Wizard Dialog	×
	TOPOLOGY VIEW	
Start to se Manage	et Group of device Group of device	
This cho	ice can help you to manage Group of device.	
🔿 Set up i	t later	
lf you wa	nna set up it later, choose this choice.	
	K Back Next X Can	cel

Step 3 - In the group management, user can add a new group and move devices into the different groups required.

🤣 Grou	p Manage	ment Dialog	×
New	Delete	Ren	
Group: Glob	al	~	
192.168.10.3			
192.168.10.4			
192.168.10.5			
192.168.10.6			
Move to Group):		
		Clo	ose

Step 4 - User can setup the GPS position of the devices by simply entering an address (internet connection required). Double click on the Address field to enter the address. Once the address has been entered click the Location button and the system will search online for the Latitude and Longitude co-ordinates of that location and fill these in the table as shown. If the address cannot be found you can also enter the co-ordinates manually by double clicking on the relevant field. Click Finish to close the wizard.

Wizard Dialog ×						
	TOPS	128	(XIEW	7		
IP	Address	Latitude	Longitude	Location		
192.168.10.3 192.168.10.4 192.168.10.5	Danbury New York	41.394817 40.7127837 40.8428759	-73.4540111 -74.0059413 -73.29289430	Search IP		
192.168.10.6	New Haven	41.308274	-72.9278835	Help		
		K Back	✓ Finish	× Cancel		

Device Discovery

User can add devices by using the built-in Discovery function.

Click the **Discovery** button located on the General tab in the main eVision interface. Enter the start and end of the IP range you wish to discover and click **Start** to discover all devices in the selected range.

9	Discovery	×
Start 192.168.10.1	1 End 192.168.10.254	
Clear List	Start Stop Finish Close	
ahal	Description	

Clear list	Clear previous discovery device list

System Menu Bar

File



Label		Hotkey	Description
	New	Ctrl + N	Open a new topology graph
	Open	Ctrl + O	Load a saved topology graph
Ġ	Import	Ctrl + I	Import a saved topology into the current topology graph
×	Close	Ctrl + C	Close current topology graph
	Save as	Ctrl + S	Save current topology graph
¢	Save all	Ctrl + L	Save all open topology graphs
	Save as	N/A	Save current topology as default graph.
	Print	Ctrl + P	Print current Topology graph
	Exit	Ctrl + E	Quit eVision

Edit



Labe	1	Hotkey	Description
0	Discovery	Ctrl + D	Open the device Discovery tool
	System Config	N/A	 Auto Polling: Enable or disable Auto Polling function of devices. Polling Time(s): Polling interval timer. Device(s) / Interval: How many devices to poll at one time. Set to zero for all devices. Trap Agent Alive: Enable trap agent so eVision can receive SNMP traps. Trap Port: Specifies the port used by the Trap Agent Topology agent: Enable / Disable topology agent function SNMP Community: SNMP community read and write settings. Version: SNMP version V1 or V2 Time out: SNMP timeout interval. Explorer Path: Specify the Internet browser path. Entry: Auto save the log file when it reaches this number of entries. Daily: Auto save the log file at a certain time each day Load Topology: Load the default topology when eVision is opened Startup: Launch eVision on Windows startup. Minimize: Minimize eVision after startup Discovery new device without cleaning: Discover new devices without clearing any current discovered devices. Launch wizard when system starts: Launch the Topology wizard every time eVision starts.

N/A

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Topology View Config

Path Size: Set the width of the path lines drawn between devices. Font Size: Set the size of the font used to display the device name/label.

Show Icon: Enable / Disable the device icon from being displayed.

Background: Set the topology graph background color. Font Color: Set the font color used for the device name/label. Show Port Number on Link: Enable / Disable the port number being shown for each device link.

Link Option: Set the link colors for the 4 different link states. Background Option: User can load any picture as the topology view background. An example is shown below.



Ċ	Device database management	N/A
/	Edit graph name	N/A

In the Device database management the user can modify or add a new device OID, link up, link down, trap and locate icons. Please refer to the next section.

Edit current topology graph name.

Device Database Management

۶	Device database management
Find	OID Edit
1.3.6.1.4.1.32298.2.2.15	OID 1.3.6.1.4.1.32298.2.2.15
1.3.6.1.4.1.32298.2.2.28	
1.3.6.1.4.1.32298.2.2.29	मा
1.3.6.1.4.1.32298.2.2.17	Linkup Icon CNGE2FE16MS.jpg
1.3.6.1.4.1.32298.2.2.9	
1.3.6.1.4.1.32298.2.2.26	
1.3.6.1.4.1.32298.2.2.27	
1.3.6.1.4.1.32298.2.2.11	
1.3.6.1.4.1.32298.2.2.24	Linkdown Icon CNGE2FE16MSno.jpg
1.3.0.1.4.1.32290.2.2.23	
136141322982292	
136141322982223	ent.
1.3.6.1.4.1.32298.2.2.20	Trap Icon CNGE2FE16MStrap.jpg
1.3.6.1.4.1.32298.2.2.21	
1.3.6.1.4.1.32298.2.2.30	
1.3.6.1.4.1.32298.2.2.31	
1.3.6.1.4.1.32298.2.2.5	Locate Joan CNCE2EE16MSIdt aif
1.3.6.1.4.1.32298.2.2.7	
1.3.6.1.4.1.32298.2.2.19	
	Add Modify Delete Save Close

User can add devices to the database using this screen. Icons and OID data can also be updated for existing devices in the database.

To add a new device to the database enter the OID (obtained from the device manufacturer) and icon names for each of the 4 available icons and then click **Add**.

To modify an existing entry in the database select the entry and then update the details followed by clicking **Modify**.

To delete an entry from the database select the entry and then click the **Delete** button.

Once all the required changes have been made click **Save** to save the new database.

Note: Icons will need to be saved in the icon folder located at ...\ComNet\eConsole\rec\device

Note: User can add non-ComNet devices into the database provided the device supports SNMP and LLDP protocols. These protocols must be enabled on the target devices in order for eVision to recognize them.

The SNMP Read Community setting must be the same on all devices and must match the eVision SNMP Read setting in the System Config menu. ComNet cannot provide any support for 3rd party devices.

View



lcon		Hotkey	Description
•	Zoom In	Ctrl + Up	Zoom in on the topology.
Θ	Zoom Out	Ctrl + Down	Zoom out of the topology.
8	Clear topology state	N/A	Clear topology state of the current graph
C Refresh topology N/A		N/A	Recheck Device: Checks if the devices still exist or not. Devices will be removed if they no longer exist. Recheck link: Check the links between devices, the links will be removed if the connection has broken. Recheck state: Check current state of devices, any devices where the status has altered will be updated. Recheck type: Check device model, will update the icon when replacing a device with the same IP but a different model.
	Topology Edit Mode 🔸	N/A	Transform: Click to move the entire topology around. Pick: Click to be able to select and drag a particular device to a new location. Line: Click to edit a line manually.

Layout

In the eVision Topology View, there are 3 types of layout which can arrange the device topology in different automatic ways, this allows the user to save time to drag every device manually.



Management

Select Management to show the Management menu.

		🤣
		File Edit View Layout Management Help General Topology Manag Group Image: Complex state of the state of th
Label	Hotkey	Description
Group	N/A	New: Add a new group. Delete: Delete selected group Rename: Rename selected group Move to Group: Move the selected device to a new gro
Map Management	N/A	Edit the device's map related information, e.g. Latitude Longitude. User can also enable or disable devices to b displayed on the map.

Help

?	
File Edit View Layout Management H	Help
General Topology Management Map Ma	<i>P</i>
🔍 Discovery 🧲 Refresh 🎽 Clear	About

Label	Hotkey	Description
About	N/A	Show the version information of eVision

Tool Bar

General



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General Topology Management M	ap Management
Transform 👆 Pick 🔪 Edi	t Centralize Find 192.168.10.6 Go Display SystemName V
lcon	Description
U Transform	Please refer to the eVision View Menu section
Pick	Please refer to the eVision View Menu section
🔪 Edit	Please refer to the eVision View Menu section
🚱 Zoom in	Please refer to the eVision View Menu section
Coom Out	Please refer to the eVision View Menu section
Layout	Layout devices automatically (KK Layout)
► Centralize	Centralize the screen on the devices
Find 192.168.10.6 G	Locate a specific device by its IP address
Display SystemName 🗸	Display device label information as IP address, System Name, Annotation, disable the label information.

Topology Management

Map Management



Device Tree & Group Tree

Detected devices will be displayed in the Device Tree and Group Tree.

In the Device Tree the user can double click on a device to search and navigate to that device in the topology graph, the user can also right click on a device for the device setting options.



In Group Tree, by default all devices will be placed under the Global Group. A Device that is enabled on the Map display will have a tick on it.

The user can also right click on the group for the group management options or right click on a device for device setting options.



Topology

The discovered device's network topology will be shown in the Topology Graph area automatically.



Important Note

eVision monitors devices that support SNMP and LLDP. Both of these functions must be enabled on each device. On some ComNet devices these features may not be enabled by default. If the device you are looking for is not displayed or does not show any port links please check that the above features are enabled on the device.

The SNMP Read Community setting must be the same on all devices and must match the eVision SNMP Read setting in the System Config menu.

In the topology graph, the user can right click on a device for the device settings options or right click on a line for the Link Status or Link Annotation.



Мар

The devices with Map Active enabled will be shown on the map. With the help of this map the user can see where the devices are installed.

Two types of map display are possible **roadmap** or **satellite**.

The user can also display a label for each device by enabling the **Label** option.



Note: Retrieving the Map display requires an Internet connection.

System Log Area

eVision also has a built-in SNMP trap manager system log that can record all SNMP trap events such as link down event etc.

To enable this feature each device must be enabled with SNMP and have the eVision PC set as a trap station in the devices SNMP configuration.



eMonitor

By using the eMonitor application the user can monitor the alive status of all IP devices. The application supports any IP addressable device on the network.

				eMonitor			- 0	×
File View Tool Hel	p							
New Open Save Ad	dd Delete Stop	Interval	3 sec Timeout 3	sec 💙 🛛 Find	Go			
Group	Monitor Me	ssage						
 Default 	Status	Туре	Description	Name	Reference	Total tests	Fail tests	
		H		192.168.10.1	1	8	8	^
		H		192.168.10.2	1	8	8	
		н		192.168.10.3	1	8	0	
		H		192.168.10.4	1	7	0	
		H		192.168.10.5	1	8	0	
		H		192.168.10.6	1	7	0	
								v
Host: (6) 💽 192.168	3.10.5							

Add device

When eMonitor is launched the Add device screen will be presented where the user can search for and add in devices by entering the IP address search range and then clicking the checkmark button followed by **Apply**.

GroupName O Group	Name		1	K			
Default 🗸 🖲 Host	Prefix	192.168.10	Start 1	End	254 🗸		
Туре		Na	ime				

Label	Description
Group	Add a new Group
Host	Enter the IP address prefix and a range to be added.

System Bar

File

File V	iew To	ool Help
\Box	New	Ctrl+N
	Open	Ctrl+0
	Save	Ctrl+S
	Exit	Ctrl+E

Label	Hotkey	Description
New	Ctrl + N	Stat new eMonitor session.
🗁 Open	Ctrl + O	Open previous saved eMonitor session
Save	Ctrl + S	Save current eMonitor session.
🚮 Exit	Ctrl + E	Quit eMonitor

Tool



Label	Description
System Config	Report: Enable / Disable the report. Agent: Enable / Disable the checking agent and set the value of the time interval and timeout.

About

eMonitor version



Function Bar

		eMonitor	
File Viev	w Tool Help		
New Op	pen Save Add Delete Stop	Interval 3 sec Timeout 3 sec 💙 Find	Go
	Label	Description	
	New	Start a new monitor session	
	Open	Open a saved file	
	Save	Save the current file	
	Add	Add a device or range of devices	
	Delete	Remove the selected device / group	
	Stop	Start or Stop the monitor	
	Interval	Checking interval timer	
	Timeout	Time out timer	
	Find	Find specific device by using IP address	

Group Tree

Devices will be show in the Group Tree.

File View Tool Help
New Open Save Add
Group
Default

Label	Description
Add	Add a device or group of devices.
Delete	Remove selected device / group.
Edit	Edit selected device / group and description.

Monitor Area

Current status of each device is shown in the Monitor table. The status for active devices will be show with a green icon and timeout devices will be shown with a red icon.

H	192.168.10.1		1456	1456
н	192.168.10.2	1	1456	1456
н	192.168.10.3	1	1457	0
H	192.168.10.4	1	1457	0
н	192.168.10.5	1	1456	0
H	192.168.10.6	1	1456	0

TroubleShooting

eConsole will not run on your computer?

Please make sure your computer has installed Java Runtime Environment (JRE).

If not, please install Java Runtime Environment (JRE) 6 Update 3 (as minimum version) from the Java website, at http://java.com/download

License key warning message

Symptom: When user launches eConsole, the computer displays a warning message as below.

Confirm	
2	Please insert license key to enter license-mode or press cancel to limit the operations to 10 devices.
	Cancel

Situation: You have installed a licensed version of eConsole and the computer cannot detect the USB license key. Please insert the USB license key to enter licensed mode and then press **OK** or press **Cancel** to limit the operation to 10 devices.

SYSLOG warning message

Symptom: When user launches eConsole, the computer displays a warning message as below.



Situation: Another software application is currently in operation as the Syslog Server. Check if there are any third party System Log Servers (e.g., tftpd) running on the computer. If you do not care about the system log function, press **Ignore** to continue.

Why can't eVision receive SNMP traps?

Symptom: When user launches eVision, the computer displays a warning message as below.



Situation: Another software application is currently in operation as the SNMP Trap manager. Check if there are any third party SNMP Software (e.g., MG-Soft or SNMPc) applications running on the computer. Please stop these applications, because they occupy the SNMP port required by eVision.

MECHANICAL INSTALLATION INSTRUCTIONS

ComNet Customer Service

Customer Care is ComNet Technology's global service center, where our professional staff is ready to answer your questions at any time. Email ComNet Global Service Center: customercare@comnet.net



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