ZyXEL ES-3024 V3.50(DT.3)C0

Release Note/Manual Supplement

Date: Dec 26, 2003

This document describes the features in the ES-3024 product for its 3.50(DT.3)C0 release.

Support Platforms:

ZyXEL ES-3024 V3.50(DT.3)C0 supports models: Dimension ES-3024

Version:

ZyNOS Version: V3.50(DT.3) | 12/26/2003 13:35:29
BootBase Version: V0.6(ES-3024) | 04/24/2003 10:54:18

Known Issue:

1. It will take more time to configure the device when there are more setting entries such as VLAN, Static MAC Forwarding, Filtering, Mirroring and Bandwidth Control in device.
2. Using Cluster Management web GUI to upgrade member's firmware is not supported.
3. Active mirroring rules can only be deleted when the Monitor Port is active.
4. Radius UDP port can't apply the value more than 32767.
5. After enter cluster member page via cluster mechanism, it need to wait for 3 minutes to access cluster member page directly via ip itself.
6. Sometimes, because of Internet Explore issue, it need to close IE and wait for 3 minutes to re-login DUT web successfully.

Bug Fix:

1.

Features:

1. **VLAN Trunking:**
   The goal of VLAN Trunking is that pass unknown VLAN packets. It is useful for ISP. If ISP wants to create a new VLAN between 2 end users, they don't set all switches in the path of the end users. For example: Refer to the following figure. Now, ISP wants to create a new VLAN 40 for User 1 and User 2. ISP just needs create VLAN 40 in devices of IES-2000. In all switches in the path, VLAN40 isn't necessary for it. In other days, ISP maybe creates VLAN41 for User 3 and User 4; ISP just needs create VLAN 40 in devices of IES-2000.
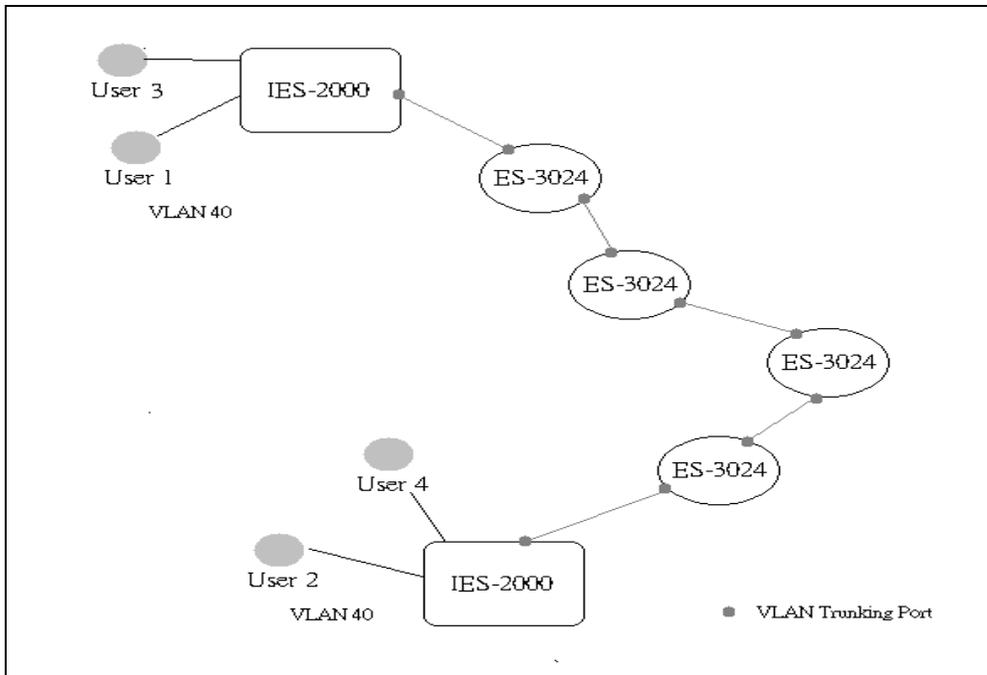
How to configure VLAN Trunking?

Enter "**Advanced Application**"->"**VLAN**"->"**VLAN Port Setting**:" In "**VLAN Port Setting** " pages, users can set PortN as VLAN Trunking Port.
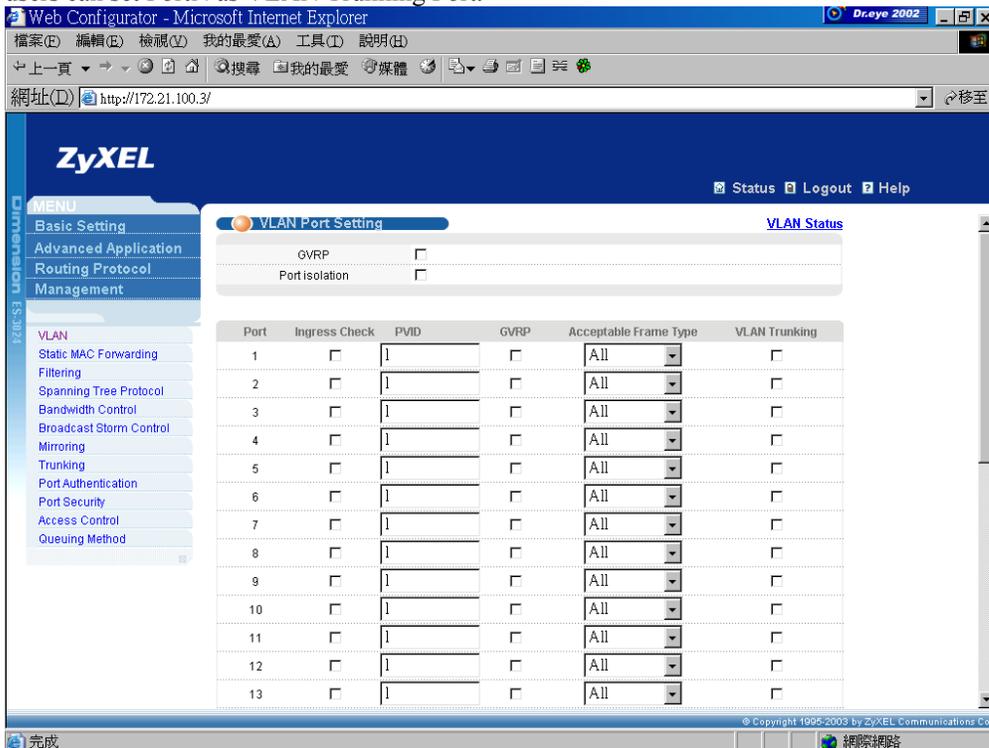
CI for cluster management:

sys   switch   vlan1q   port   vlanTrunking   <port>   <enable/disable>

2. **Load Factory Default:**

Load factory default feature is added in this version. User can use it to restore factory default.

How to restore factory default?

Enter "**Management**"->"**Maintenance**", In "**Maintenance**" page, click "**Load Factory Default**" bottom.
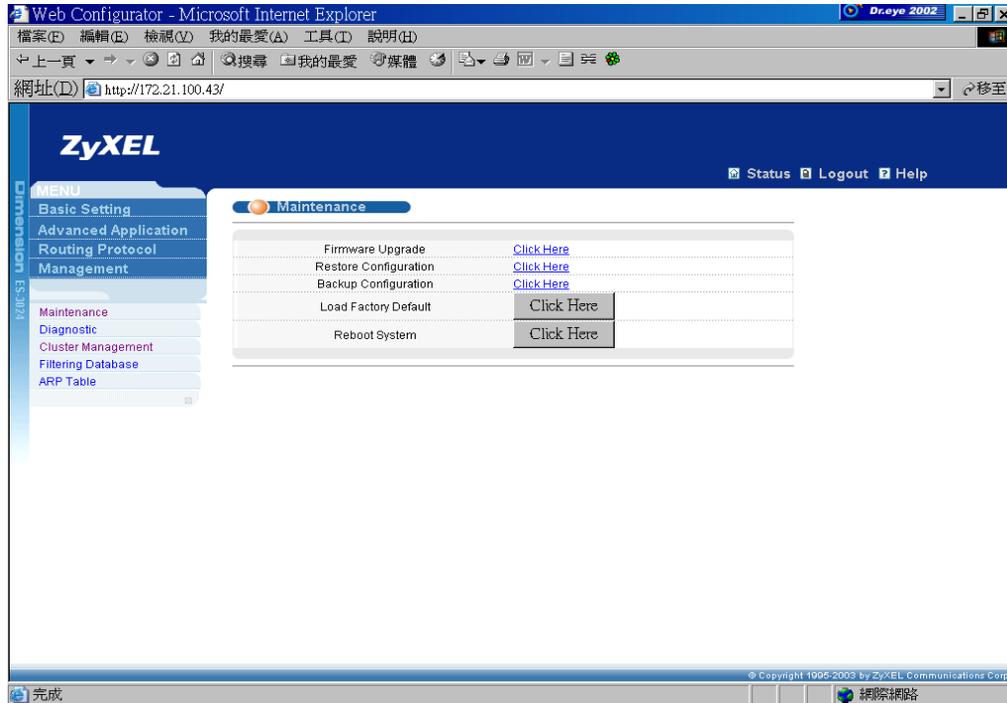
3. **Upgrade and download FW/Config files of members by FTP**

In clustering environment , user can upgrade FW by FTP. The member's firmware/config name in ES-3024 are fw-<MAC address> and config-<MAC address>.

Example:

```
C:\> ftp <ES-3024 IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> ls
200 Port command okay
150 Opening data connection for LIST
--w--w--w-   1 owner    group          1399654 Jul 01 12:00 ras
-rw-rw-rw-   1 owner    group           262144 Jul 01 12:00 rom-0
--w--w--w-   1 owner    group                0 Jul 01 12:00 fw-00-a0-
c5-05-02-34
-rw-rw-rw-   1 owner    group                0 Jul 01 12:00 config-00-
a0-c5-05-02-34
226 File sent OK
ftp: 296 bytes received in 0.01Seconds 19.73Kbytes/sec.
ftp> put 350DT3b1.bin fw-00-a0-c5-05-02-34
ftp> bye
```

Where:
- User name : just press <Enter>
- Password : the management password, 1234 by default
- 350DT3b1.bin : the name of firmware file you want to upgrade

- fw-00-a0-c5-05-02-34 : the member's firmware name in ES-3024. fw-<member's MAC address>

4. **Cluster management:**
Using single IP to manage multiple devices simultaneously. The max device number is 8. If this feature is enabled, ES3024 will discover cluster management aware devices. User can select up to 8 devices adding to the cluster.
How to configure the clustering?
   Enter "**Management**"->"**Cluster management**"->"**Clustering Management Configuration**:" In "**Clustering Management Configuration**" pages, select devices adding to the clustering. In the bottom of this page, show the members of this cluster. Warning picture with yellow color means the member is in Error state.
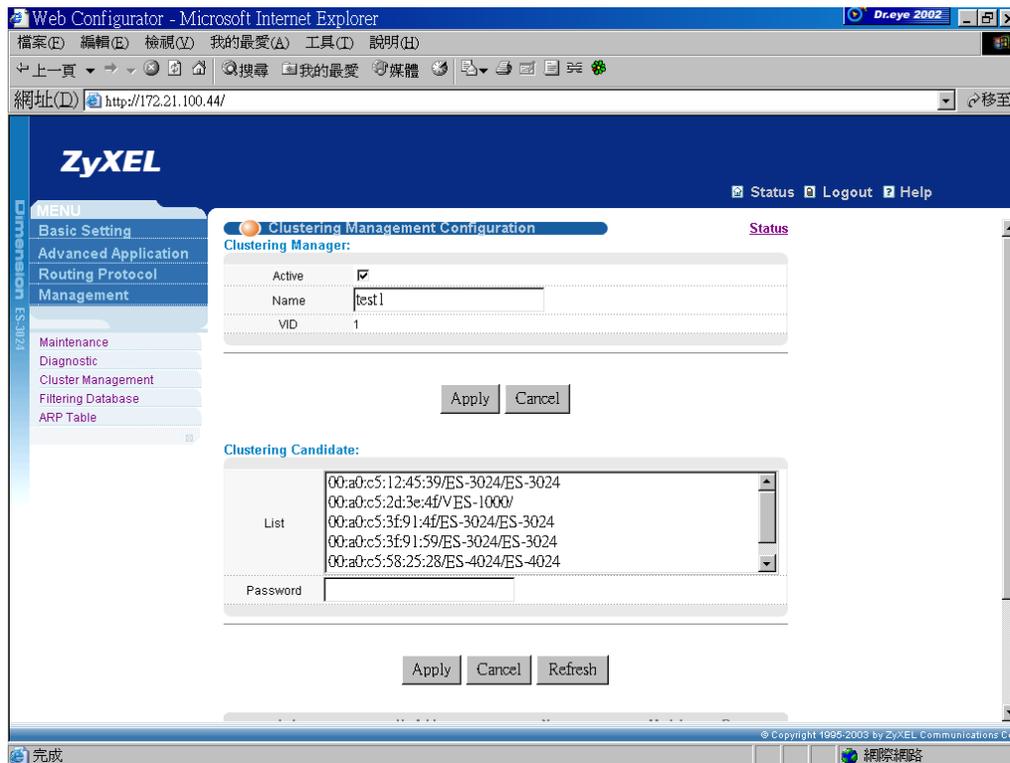
How to browse members?
Enter "**Management**"->"**Cluster management**"->"**Clustering Management Status**", this page direct you to member's pages.
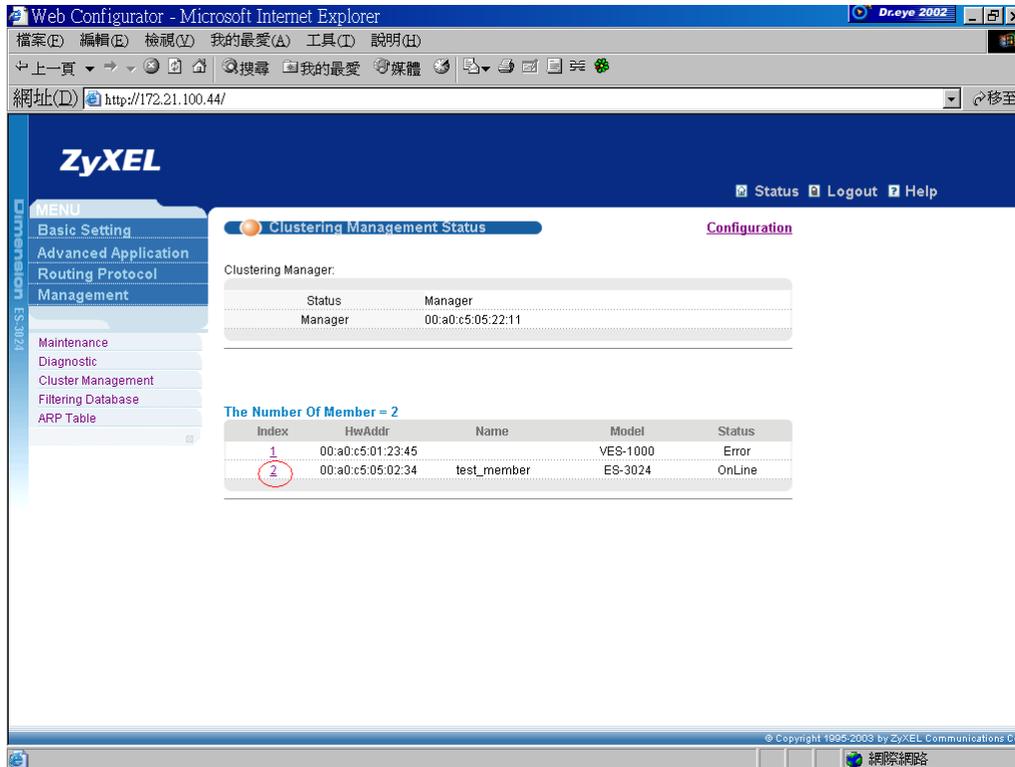
CI for cluster management:

sys	cluster	active	<name>		Active cluster
		inactive	<name>		Inactive cluster
		add	<MAC addr>	<password>	Add a member into cluster
		remove	<MAC addr>		Remove a member from cluster.
		showMemeber			Show member list
		showCandidate			Show candidate list
		status			Show cluster status

5. **New type GUIs:**
   Follow ES4024 GUI style.

6. **Queue method:**
   There are two queuing algorithms: strict priority queue and weight fair queue. If using strict priority algorithm, a higher priority queue always go first.
   Please enter "**Advanced Application**"->"**Queuing Method**" to configure this feature.
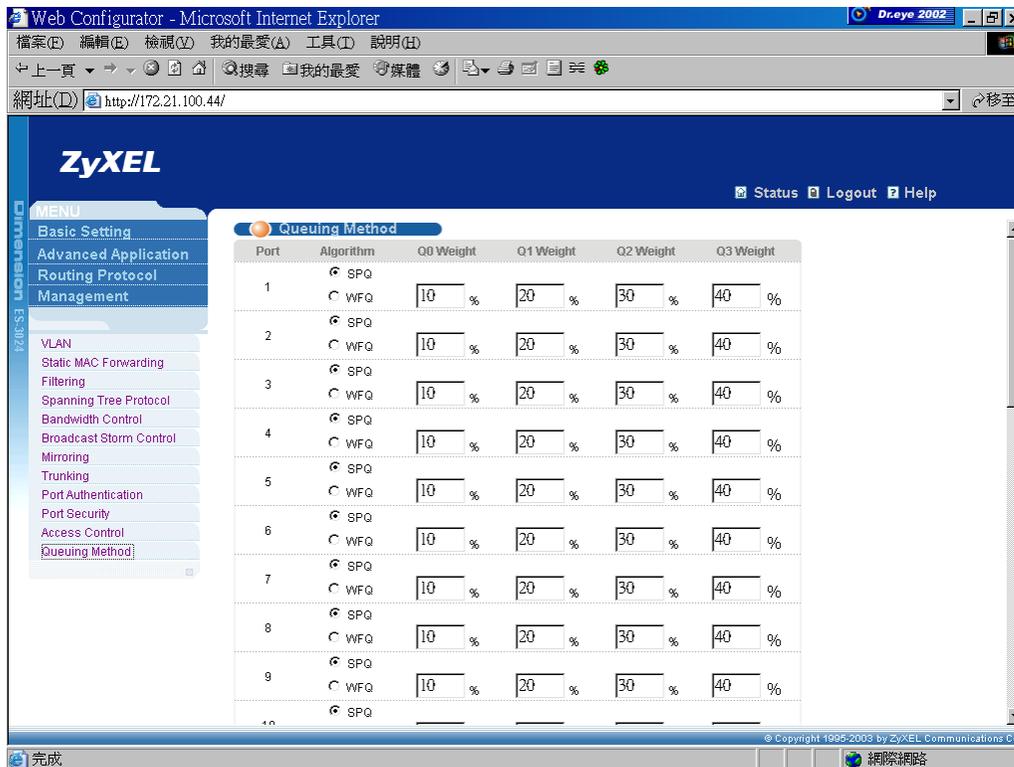
7. **Diagnostic information:** Filtering Database and ARP Table
    Filtering Database:
    Please enter "Management"->"Filtering Database" to get information. The system support 3 sorting methods: MAC, VID and port.
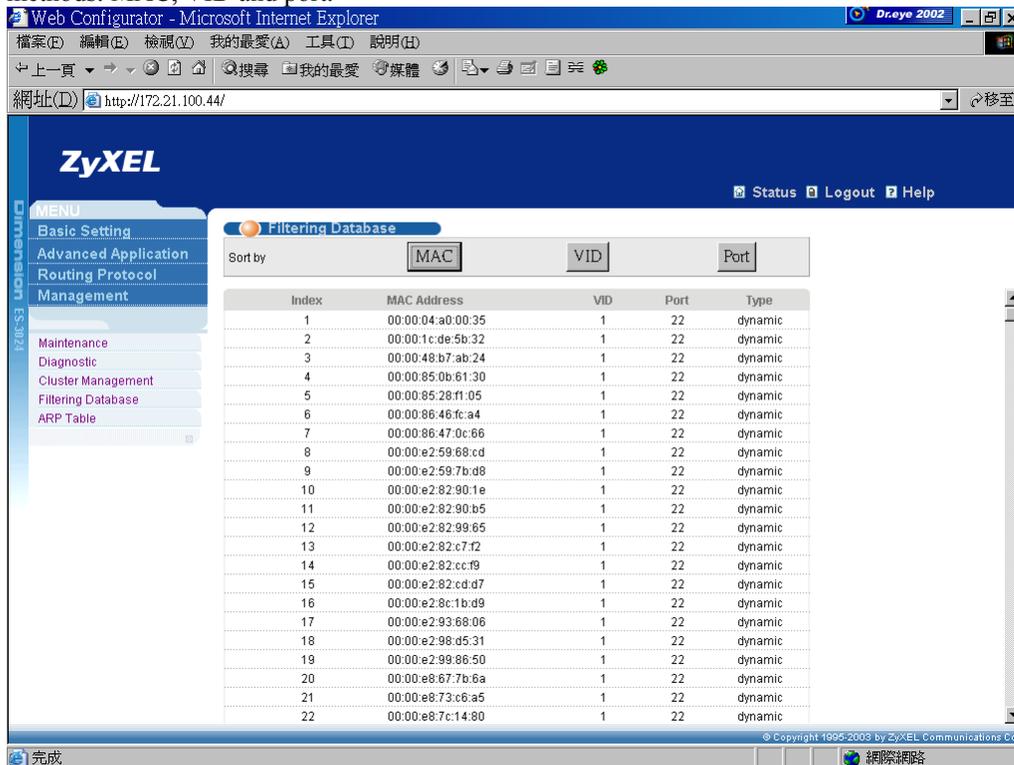
*ARP Table:
Please enter "Management"->"ARP Table" to get information.

8. **DHCP client:**
This feature support ES3024 getting IP address automatically. Please enter "**Basic Setting**"->'**IP SetUp**" page to enable this feature.
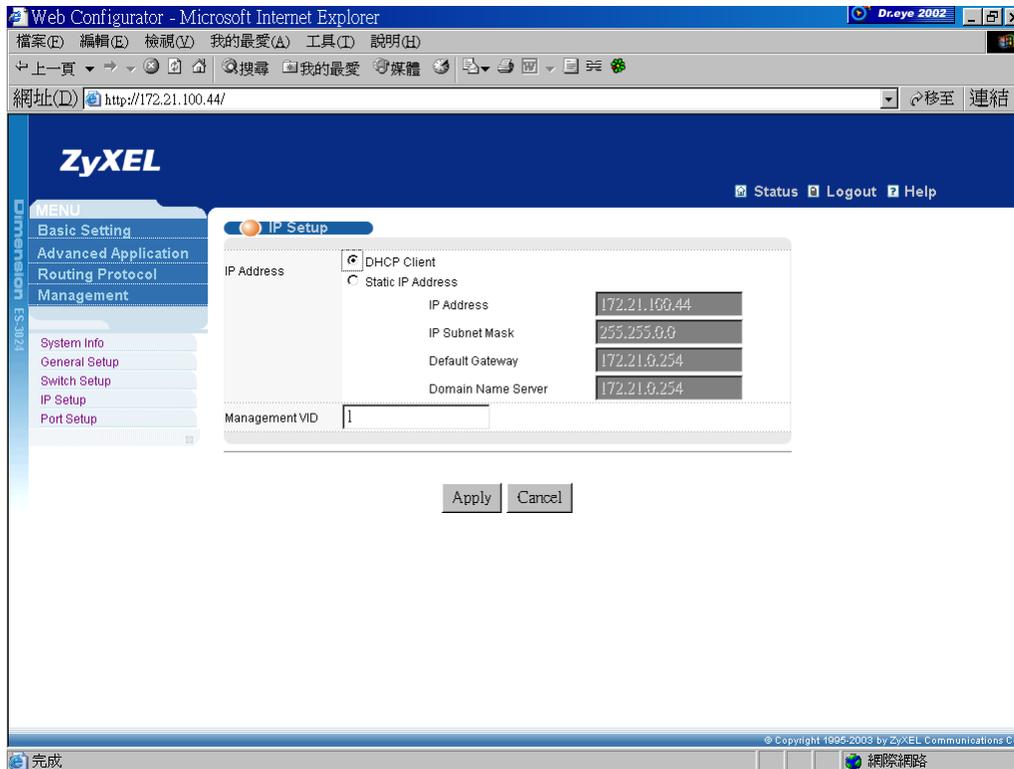
CI for DHCP client:

ip	dhcp	<Iface>	mode	<none | client>	Change DHCP mode for interface <Iface>
			status		Show DHCP status
			client	release	Release the IP address
				renew	Renew the IP address.

9. **CI: IP setup:**
    User can use CI to setup IP and save to rom.
    Example:
    ES-3024>
    ES-3024> ip ifconfig swif0 172.21.100.45 vid 1
    ES-3024> config save
    ES-3024>

10. **Support multiple VLAN in IGMP Snooping**:
    IGMP Snooping now will support up to 16 VLANs

Firmware Upgrade:

The ES-3024 uses FTP to upgrade firmware in run-time through its built-in FTP server. You can use any FTP client (for example, ftp.exe in Windows) to upgrade ES-3024. The upgrade procedure is as follows:

Upgrade ES-3024 FW:

```
C:\> ftp <ES-3024 IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 350DT3b0.bin ras
ftp> bye
```

```
Where
    • User name : just press <Enter>
    • Password : the management password, 1234 by default
    • 350DT3b0.bin : the name of firmware file you want to upgrade
    • ras : the internal firmware name in ES-3024
```

Configuration Upgrade:

The ES-3024 uses FTP to upgrade configuration in run-time through its built-in FTP server. You can use any FTP client (for example, ftp.exe in Windows) to upgrade ES-3024. The upgrade procedure is as follows:

Upgrade ES-3024 configuration:

```
C:\> ftp <ES-3024 IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 350DT3b0.rom rom-0
ftp> bye
```

```
Where
    • User name : just press <Enter>
    • Password : the management password, 1234 by default
    • 350DT3b0.rom : the name of configuration file you want to upgrade
    • rom-0 : the internal configuration name in ES-3024
```

Commands Table:

sys

monitor	status				show h/w monitor status
	show				show h/w monitor statistics
	vlimit	<idx>	<high>	<low>	set voltage <idx> with <high> <low> limit
	tlimit	<idx>	<limit>		set temperature <idx> with <limit> limit
	flimit	<bank>	<idx>	<limit>	set fan <idx> RPM limit in bank <bank>
	fanmask	<bank>	[<mask>]		set fan detection mask in bank <bank>
	vclear				clear voltage statistics
	tclear				clear temperature statistics
	fclear				clear fan statistics
	clear				clear h/w monitor statistics
	enable	[<on/off>]			enable/disable h/w monitor
	test				test h/w monitor chip
ixe2424	lbt	intlbt	<port|All>	[count]	Internal loop back test on given port or All ports.
		extlbt	<port|All>	[count]	External loop back test on given port or All ports.
	log	level	[0-4]		Log level
		switch	on/off		Log to tracelog. (Current diplay to console directly)
	memdump	<start_addr>	<length>		Dump the memory map that ixe2424 mapped to.
	wreg	<addr>	<value>		Write to a register
	rreg	<addr>			Read from a register
	pktcnt	<port>			Display port statistic counter
	pktcntclear	<port>			Reset port statistic counter
	show_int _count				Display interrupt counter
	clear_int _count				Reset interrupt counter
snmp	getCommunity	[<community>]			Set or view community of GetRequest.
	setCommunity	[<community>]			Set or view community of SettRequest.
	trustedHost	[<hsot>]			Set or view trusted host.
	trapCommunity	[<community>]			Set or view community of Trap
	trapDest	[<destination>]			Set or view trap server.
	disp				View snmp setting.
cluster	active	<name>			Active cluster

inactive	<name>					Inactive cluster
add	<MAC addr>	<password>				Add a member into cluster
remove	<MAC addr>					Remove a member from cluster.
showMe meber						Show member list
showCan didate						Show candidate list
status						Show cluster status

config	save	Save configuration

Switch commands: The following commands are under "**sys switch** "

garp	status					show garp timer status
	timer	<join timer(ms)>	<leave timer(ms)>	<leave all timer<ms>		set garp timer <join timer> <leave timer> <leave all timer>
gvrp	status					show gvrp status
	enable					enable gvrp function
	disable					disable gvrp function
qos	defpri	<port>	[<0..7>]			set the default ingress User Priority for this port <port>.
	map	<0..7>	[<queue>]			User Priority to Traffic Class mapping.
vlan1 q	port	status	<port>			show port <port> VLAN information.
		defaultVI D	<port>	<VID>		set defaultVID<VID> of this port<port>.
		accept	<port>	<all|tagged >		set acceptFrameType of this port.
		gvrp	<port>	<enable|dis able>		Enable/disable the gvrp function of this port <port>.
	svlan	cpu	<VLAN ID>			Set VLAN ID of cpu.
		setentry	<name>	<VID>	<port>	<adctl> <<tagctl> set static entry.<VID>
		delentry	<VID>			delete static entry<VID>
		active	<VID>			active the static entry with <VID>
		inactive	<VID>			inactive the static entry with <VID>
		list				show the static entry table.
	vlan	list	<all|vid|start_vid end_vid>			Show vlan1q current table.
driver	count	disp				Show the switch NDIS level counters(CPU interface)
		clear				Clear the switch NDIS level counters(CPU interface)

rstp				Please reference to 802.1w
	bridge			
		enable		Enable RSTP
		disable		Disable RSTP
		priority	<priority>	System Priority
		maxAge	<max age>	Max age timer
		helloTime	<hello time>	Hello timer
		forwardDelat	<forward delay time>	Forward delay time
		version	<STP:0|RSTP:2>	Operation Mode
	port			
		enable	<Port_NO>	Enable this port under RSTP protocol
		disable	<Port_NO>	Disable this port under RSTP protocol
		pathCost	<Port_NO>	Cost of this path
		priority	<Port_NO>	Priority
		edgePort	<Port_NO>	If this port is an edge port
		p2pLink	<Port_NO>	Whether the Port concerned can only be connected to exactly one other Bridge or can be connected to two or more Bridges
		mcheck	<Port_NO>	802.1w chapter 17.18.10
lacp				Please reference to 802.3ad
	agg			Display aggregation information
	port			
		enable	<Port_NO>	
		disable	<Port_NO>	
		status	<Port_NO>	
		actorAdm		Actor means local side
			activity	[Port_NO [0:passive|1:active]]
			display	[Port_NO]
			key	[Port_NO [Key]]
			priority	[Port_NO [Priority]]
			timeout	[Port_NO [0:long_timeout|1:short_timeout]]
		status		
		keymgnt	[on|off]	
		sysPriority	<priority>	
dot1x				Please reference to 802.1x

enable					Enable dot1x
disable					Disable dot1x
status					Show dot1x global status
port					
	enable	<Port_NO>			Enable this port
	disable	<Port_NO>			Disable this port
	reauth	<Port_NO>	<on|off>		Re-authentication
	reauthPeriod	<Port_NO>	<value>		Re-authentication period
	status	<Port_NO>			Port status
set					
	auth	<profile | radius>			Set authentication method
	portcontrol	<port-no>	<auto |auth | unauth>		Set port authentication status
radius					
	server	<IP>			Server IP
	secret	<secret>			Secret key
	port	<port>			Server port
	show				Display server setting
profile					(Won't be saved in flash)
	add	<username>	<passwd>		Add a user profile
	delete	<idx>			Delete a user profile
	list				List profile setting
class					Class setting
	display				display run-time status
	l2set	<src port>	<src MAC> <src vid>	<dest port>	<dest MAC> <dest vid>	Set src/dest port/MAC combination
	del	<class id>			Delete this class
bmstorm					Broadcast Storm Control
	disable				Clear current run-time settings
	type	<type>			Broadcast/Multicast/Both
	basis	<type>			Pkt/Byte
	display	[index]			Display ports setting
	interval	[value]			Set/display monitor interval
	set	<port>	<dhreshold>	<direction>	Threshold:# of pkt can be passed in the interval Direction:ingress/egress
	del	<index>			Disable on this port
mac	static				Static MAC setting
		disable			Clear current run-time settings
		display	[port]		display run-time status
		set	<port>	<MAC Addr.>	<vid>	Set static MAC of the port
		del	<port>	<MAC>	<vid>	Delete static MAC of the

			Addr.>			port
filter						MAC filter setting
	disable					Clear current run-time settings
	display					display run-time status
	set	<src port>	<src MAC> <src vid>	<dest port>	<dest MAC> <dest vid>	Set src/dest port/MAC combination (Use "*" as "don't-care" in each field)
mirror						Mirror setting
	disable					Clear current run-time settings
	display					display run-time status
	set	<src port>	<src MAC> <src vid>	<dest port>	<dest MAC> <dest vid>	Set src/dest port/MAC combination for mirror settings (Use "*" as "don't-care" in each field)
		<input|output|both>				
	port	<port>				What port mirror to
bw						Bandwidth Control setting
	disable					Clear current run-time settings
	display					display run-time status
	set	<src port>	<src MAC> <src vid>	<dest port>	<dest MAC> <dest vid> <Max BW>	Set src/dest port/MAC combination (Use "*" as "don't-care" in each field)
trunk						Trunking setting
	disable					Clear current run-time settings
	display					display run-time status
	set	<group>	<# ports>			Set trunking group
	del	<group>				del trunking group

ip	dhcp	<Iface>	mode	<none | client>	Change DHCP mode for interface <Iface>
			status		Show DHCP status
			client	release	Release the IP address
				renew	Renew the IP address.