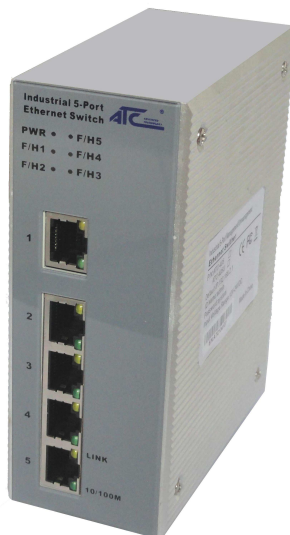


GC-ATC-405

5-Port 10/100Mbps Fast Ethernet Switch

Web Management User Manual



Revision A September 8, 2011

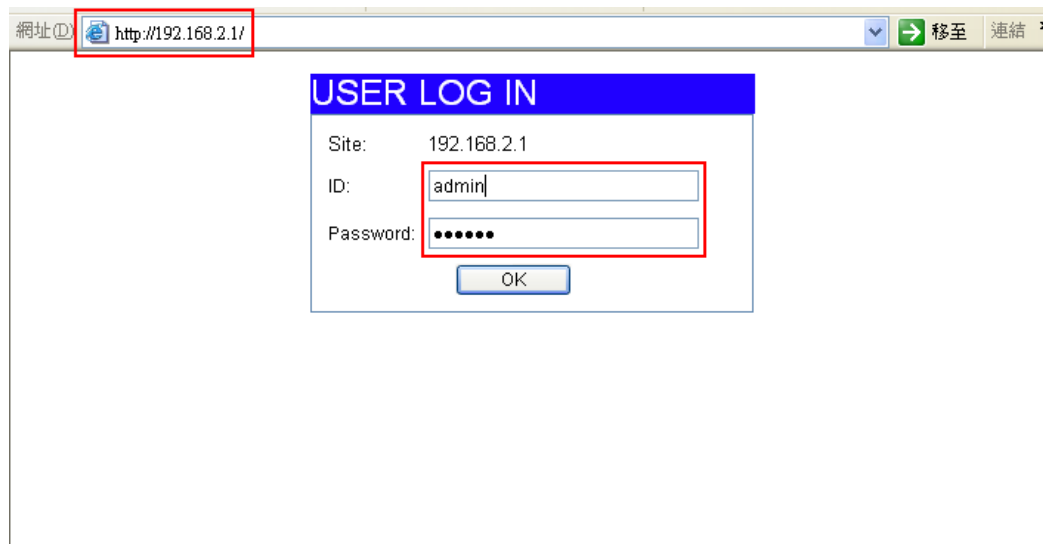
Table of Contents

A	Logging In	3
1	Administrator	4
1.1	Authentication configuration	4
1.2	System IP Configuration	5
1.3	System status.....	6
1.4	Load default setting	7
1.5	Firmware update.....	8
1.6	Reset device	9
2	Port Management	10
2.1	Port configuration	10
2.2	Flow control setting	11
2.3	Port mirroring	12
2.4	Bandwidth Control	19
2.5	Broadcast Storm Control.....	20
3	VLAN Settings.....	23
3.1	VLAN mode	23
3.2	Port based VLAN.....	24
3.3	Tag based VLAN.....	31
4	QoS Setting	34
4.1	Port based priority	35
4.2	VLAN tag priority.....	38
4.3	TOS/DSCP priority.....	41
4.4	TCP/UDP priority	44
5	Security Filter.....	47
5.1	MAC ID filter.....	47
5.2	Firewall	50
6	Configuration Backup/Recovery	56
7	Miscellaneous.....	57
8	Logout	58
9	Trouble Shooting.....	58

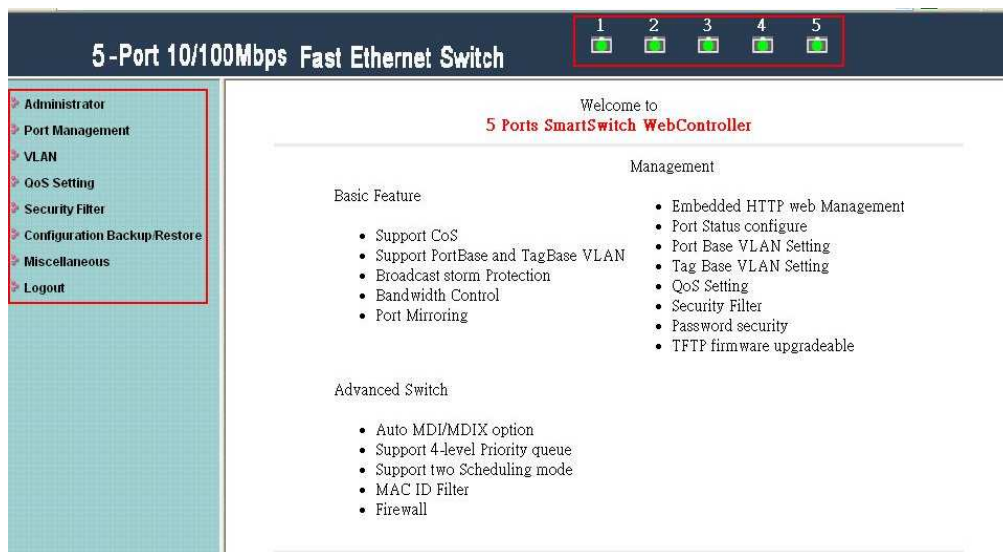
A Logging In

Enter IP=192.168.2.1 at web site field. USER LOG IN diagram box will appear.

Enter the correct ID and Password (the default is admin and system) .



After login, the brief description of the main function will appear.



1 Administrator

1.1 Authentication configuration

This page is used to change the user name and the password.

The Authentication Configuration diagram box allows user to modify username and password, and then enter new username and password. After completing, press update button to take effect.

5-Port 10/100Mbps Fast Ethernet Switch

1

2

3

4

5

Administrator

- Authentication Configuration
- System IP Configuration
- System Status
- Load default setting
- Firmware Update
- Reset Device
- Port Management
- VLAN
- QoS Setting
- Security Filter
- Configuration Backup/Restore
- Miscellaneous
- Logout

Authentication Configuration

Setting	Value
Username	admin max:15
Password max:15
Confirm

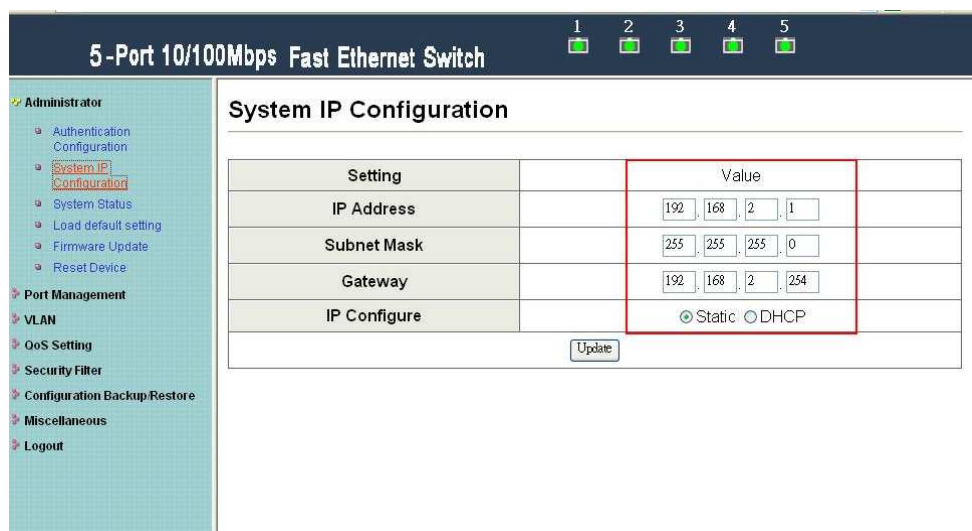
Update

Note:
Username & Password can only use "a-z","A-Z","0-9".

1.2 System IP Configuration

This page shows system configuration including the current IP Address, Subnet Mask, Gateway, and IP Configure.

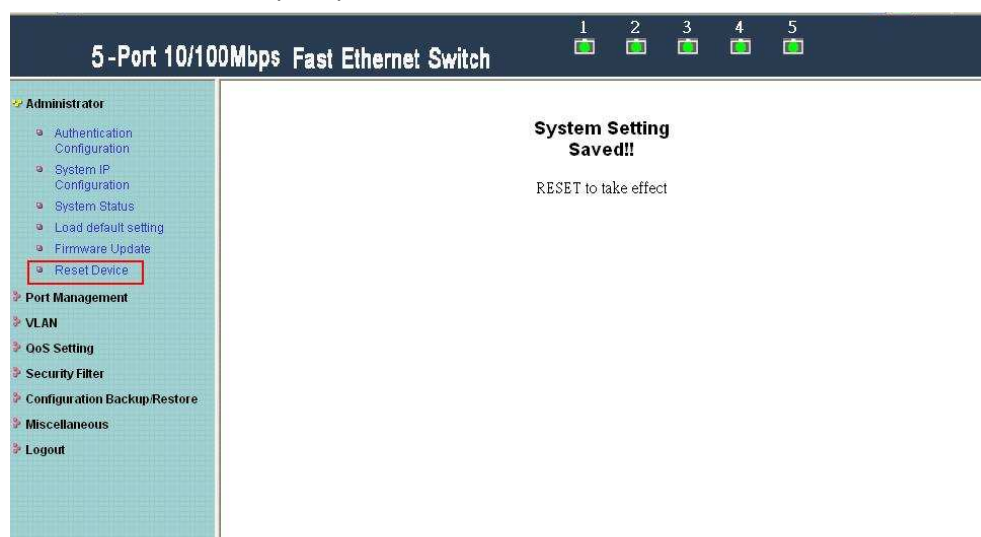
The IP Address, Subnet Mask, and Gateway at system IP Configuration diagram box can be configured by the user. The GC-ATC-405 also supports DHCP methods to get its IP address from a DHCP server. After changing the IP configuration, press the “Update” button.



Setting	Value
IP Address	192 . 168 . 2 . 1
Subnet Mask	255 . 255 . 255 . 0
Gateway	192 . 168 . 2 . 254
IP Configure	<input checked="" type="radio"/> Static <input type="radio"/> DHCP

Update

Press reset device when prompted.



System Setting Saved!!

RESET to take effect

1.3 System status

This page is used to check the status of the switch, including the switches MAC address and software version.

5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Administrator

- Authentication
- Configuration
- System IP
- Configuration
- System Status**
- Load default setting
- Firmware Update
- Reset Device
- Port Management
- VLAN
- QoS Setting
- Security Filter
- Configuration Backup
- Miscellaneous
- Logout

System Status

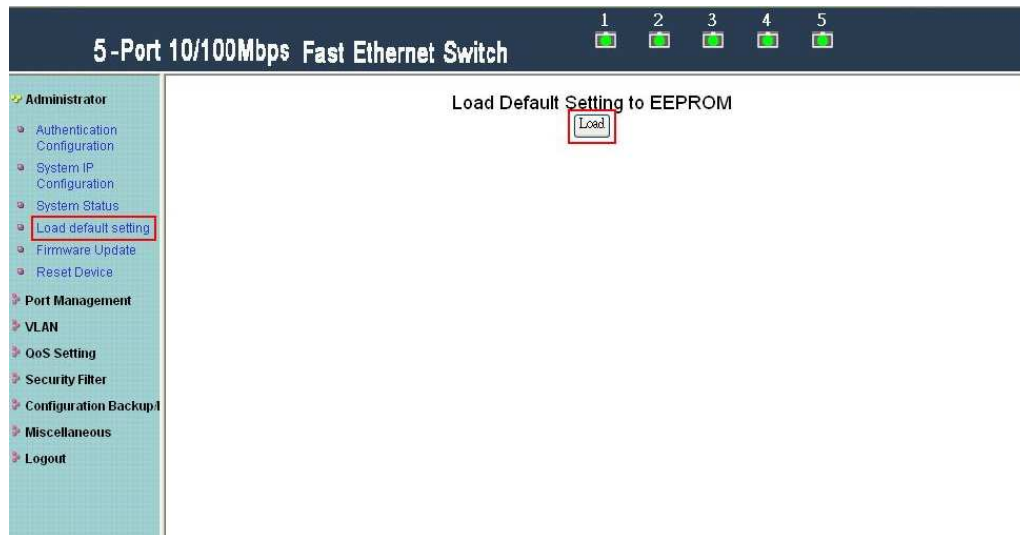
MAC Address	50:50:13:F0:13:F0
Number of Ports	5
Comment	<input type="text" value="Switch"/>
System Version	ICPlus_IP175D_v108

Note:
 Comment name can only use "a-z", "A-Z", "_", "+", "-", "=", "."

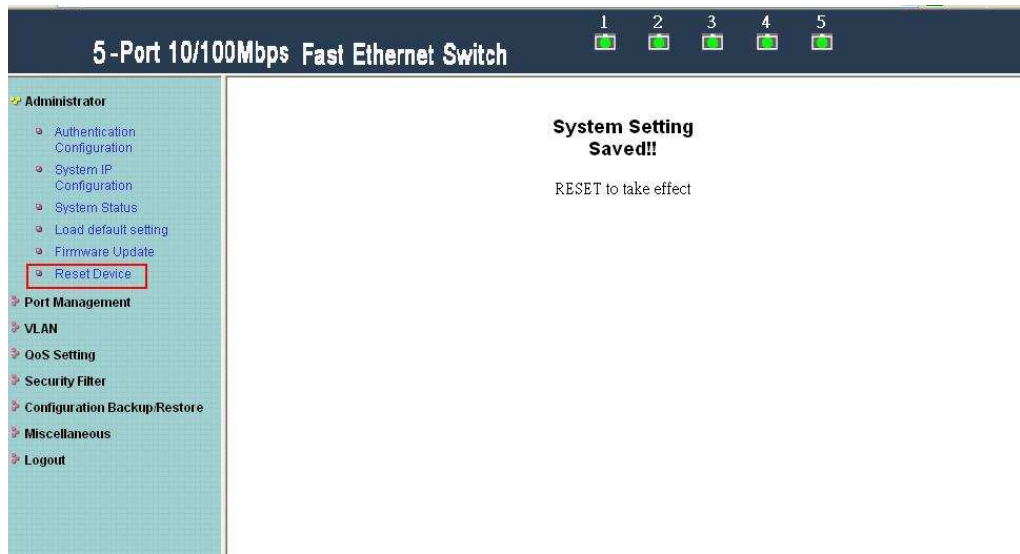
The MAC address and version of the GC-ATC-405 will be shown at the system status diagram box. The comment field is used to name the device.

1.4 Load default setting

Clicking the “Load default setting” button will set the switch to its original configuration.



Note: This change only concerns the switch behavior and excludes the user name, password, and IP configuration.

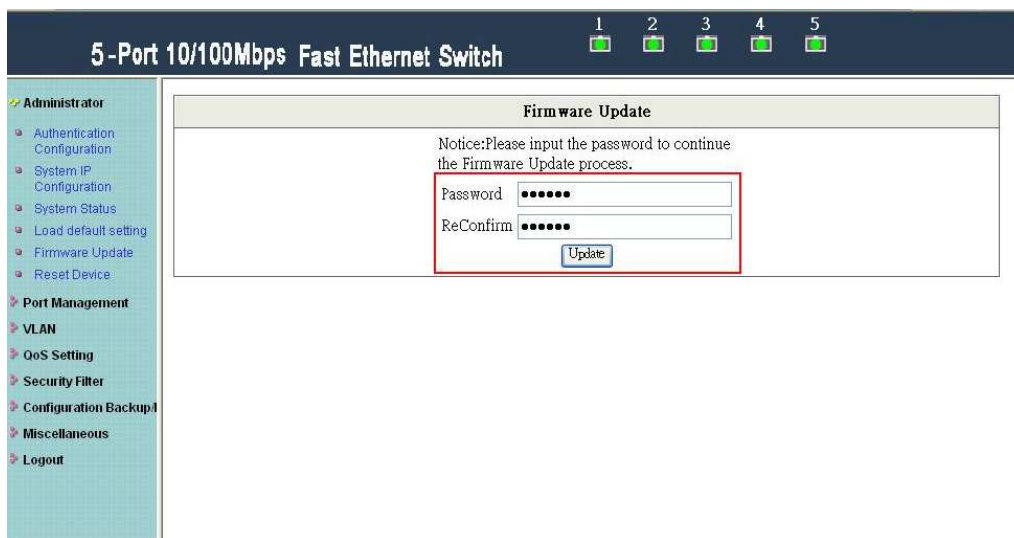


Press reset device when prompted.

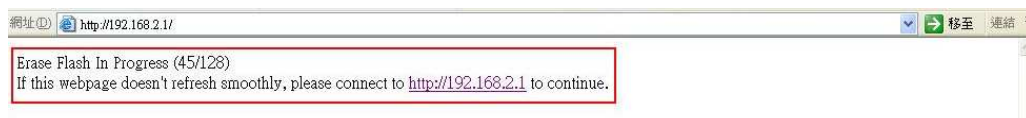
1.5 Firmware update

After pressing firmware update button, the switch will erase the older version flash code first. Then enter file name at specific path, and the update will be completed.

Enter password to execute the firmware update process.



After pressing the “Update” button, the old web code will be erased.



Enter the correct path and press “UPDATE” button to complete firmware update process.



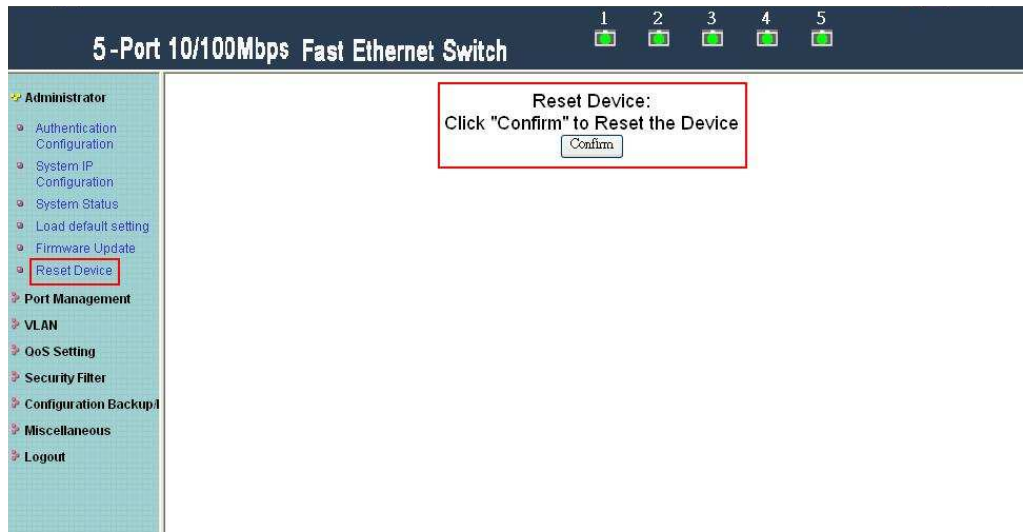
Firmware update is finished.



1.6 Reset device

This page is used to reset the device.

Press the "Confirm" button to reboot the device.



2 Port Management

2.1 Port configuration

This page allows the user to configure the operating mode of the physical ports. After completing the settings, press the “Submit” button to take effect.

5-Port 10/100Mbps Fast Ethernet Switch

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

Administrator

Port Management

- Port Configuration
- Flow Control Setting
- Port Mirroring
- Bandwidth Control
- Broadcast Storm Control
- VLAN
- QoS Setting
- Security Filter
- Configuration Backup
- Miscellaneous
- Logout

Port Configuration

Function	Auto Negotiation	Speed	Duplex	Pause	Frame Forwarding	Learning Capability
	<input type="button" value="v"/>	<input type="button" value="10M"/>	<input type="button" value="Half"/>	<input type="button" value="Disable"/>	<input type="button" value="v"/>	<input type="button" value="v"/>
Select Port NO.	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5					
<input type="button" value="Submit"/>						

Port No.	Current Status			Setting Status						
	Link	Speed	Duplex	Auto Negotiation	Speed	Duplex	Pause	Frame Forwarding	Learning Capability	
1	●	100	Full	Enable	100	Full	Enable	Enable	Enable	
2	●	100	Full	Enable	100	Full	Enable	Enable	Enable	
3	●	100	Full	Enable	100	Full	Enable	Enable	Enable	

The setting will be reflected at the current status window.

5-Port 10/100Mbps Fast Ethernet Switch

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

Administrator

Port Management

- Port Configuration
- Flow Control Setting
- Port Mirroring
- Bandwidth Control
- Broadcast Storm Control
- VLAN
- QoS Setting
- Security Filter
- Configuration Backup
- Miscellaneous
- Logout

Port Configuration

Function	Auto Negotiation	Speed	Duplex	Pause	Frame Forwarding	Learning Capability
	<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>
Select Port NO.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5					
<input type="button" value="Submit"/>						

Port No.	Current Status			Setting Status						
	Link	Speed	Duplex	Auto Negotiation	Speed	Duplex	Pause	Frame Forwarding	Learning Capability	
1	●	100	Full	Enable	100	Full	Enable	Enable	Enable	
2	●	10	Half	Enable	10	Half	Disable	Enable	Enable	
3	●	100	Full	Enable	100	Full	Enable	Enable	Enable	

2.2 Flow control setting

This page allows the user to enable or disable flow control. Choose your backpressure and IEEE 802.3x flow control settings and then press the “Submit” button.

5-Port 10/100Mbps Fast Ethernet Switch

1
2
3
4
5

Administrator
Port Management
VLAN
QoS Setting
Security Filter
Configuration Backup
Miscellaneous
Logout

Flow Control Setting

Backpressure	IEEE 802.3x Flow Control
Disable	Disable
Submit	

Backpressure	IEEE 802.3x Flow Control
Enable	Enable

The setting will be reflected at the current status window.

5-Port 10/100Mbps Fast Ethernet Switch

1
2
3
4
5

Administrator
Port Management
VLAN
QoS Setting
Security Filter
Configuration Backup
Miscellaneous
Logout

Flow Control Setting

Backpressure	IEEE 802.3x Flow Control
Submit	

Backpressure	IEEE 802.3x Flow Control
Disable	Disable

2.3 Port mirroring

The port mirroring function is accomplished by setting the following items.

- (a) Mirror port: Select a mirror port to monitor the traffic source.
- (b) Mirror mode: (1)Disable: means this function is disabled. (2)RX: means copy the incoming packets of the selected source port to the selected mirror port. (3)TX: means copy the outgoing packets of the selected source port to the selected mirror port. (4)RX & TX: Copy Both TX & RX to the mirror port.
- (c) Source port: The traffic source that will be copied to the mirror port.
- (d) Mirror source: The destination pair (press “Change mirror mode” button): one port of TX & RX must be the different.

RX (ingress packets)

Set your source port, mirror port, and mirror mode.

5-Port 10/100Mbps Fast Ethernet Switch

1

2

3

4

5

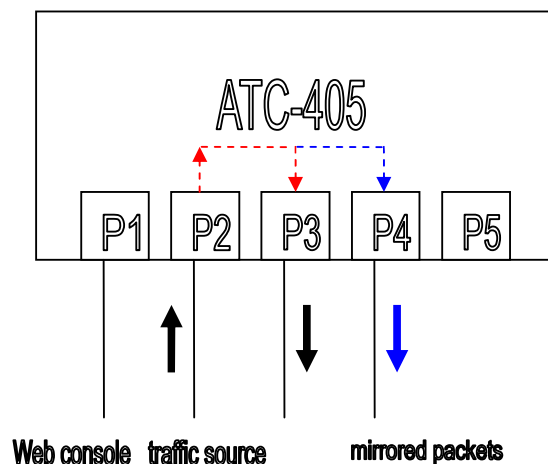
- Administrator
- **Port Management**
 - Port Configuration
 - Flow Control Setting
 - Port Mirroring
 - Bandwidth Control
 - Broadcast Storm Control
- VLAN
- QoS Setting
- Security Filter
- Configuration Backup
- Miscellaneous
- Logout

Port Mirroring

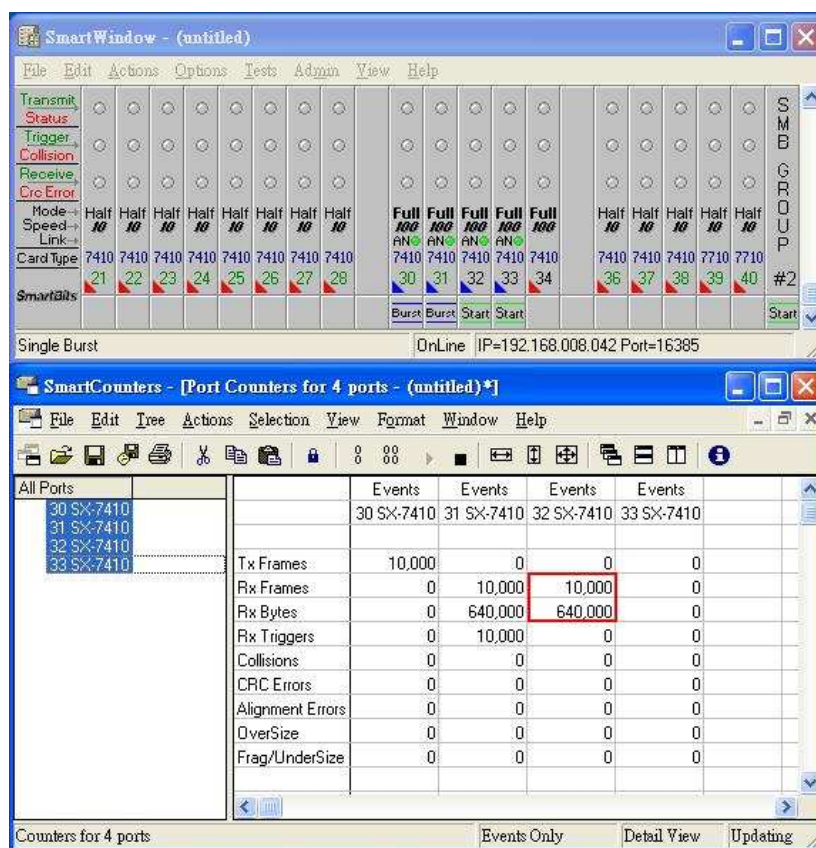
Change Mirror mode

Mirror Port	1	2	3	4	5
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Mirror Mode	Rx				
Source Port	1	2	3	4	5
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The SmartBits transmits packets to port 3.



When port 2 forwards unicast packets to port 3, GC-ATC-405 will copy ingress packets of port 2 to port 4.



TX (egress packet)

Set source port, mirror port, and mirror mode.

5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

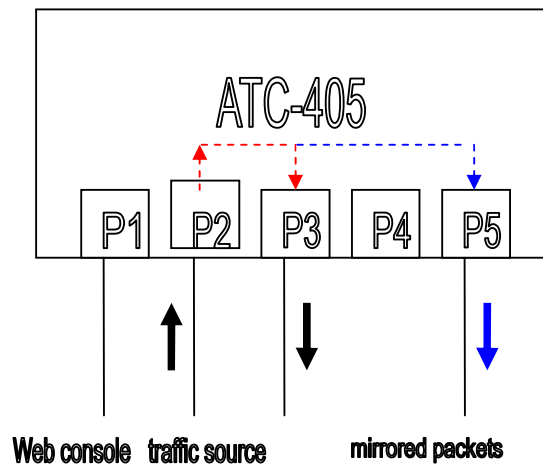
- Administrator
- Port Management
 - Port Configuration
 - Flow Control Setting
 - Port Mirroring
 - Bandwidth Control
 - Broadcast Storm Control
- VLAN
- QoS Setting
- Security Filter
- Configuration Backup
- Miscellaneous
- Logout

Port Mirroring

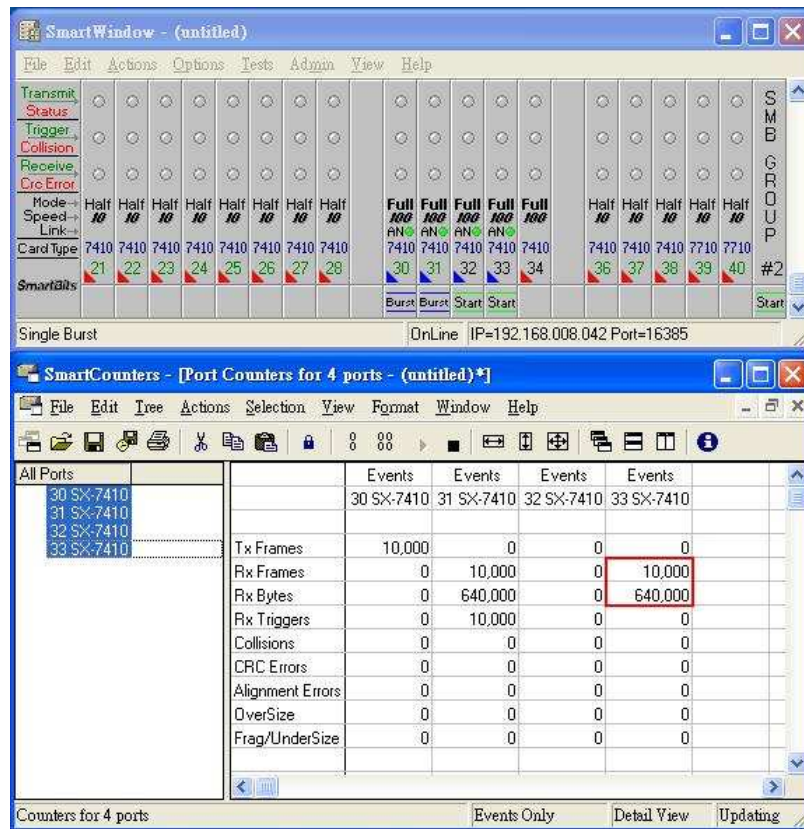
Change Mirror mode

Mirror Port	1	2	3	4	5
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Mirror Mode	Tx				
Source Port	1	2	3	4	5
	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

The SmartBits transmits packets to port 2.



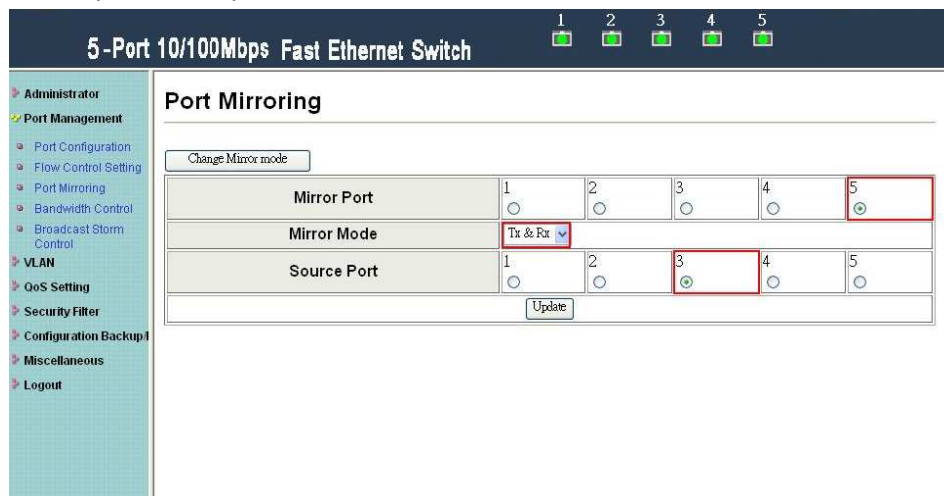
When port 2 forwards packets to port 3, it will copy egress packets of port 3 to port 5.



The image shows two screenshots from a network management interface. The top screenshot is the 'SmartWindow' window, which displays a table of network statistics for various ports. The bottom screenshot is the 'SmartCounters' window, which shows a detailed view of port counters for four ports (30 SX-7410, 31 SX-7410, 32 SX-7410, and 33 SX-7410). The 'SmartCounters' window has a table with columns for 'Tx Frames', 'Rx Frames', 'Rx Bytes', 'Rx Triggers', 'Collisions', 'CRC Errors', 'Alignment Errors', 'OverSize', and 'Frag/UnderSize'. The 'Rx Bytes' column for port 32 SX-7410 is highlighted with a red box, showing a value of 640,000.

TX and RX (one port of TX & RX must be the same)

Set source port, mirror port, and mirror mode.

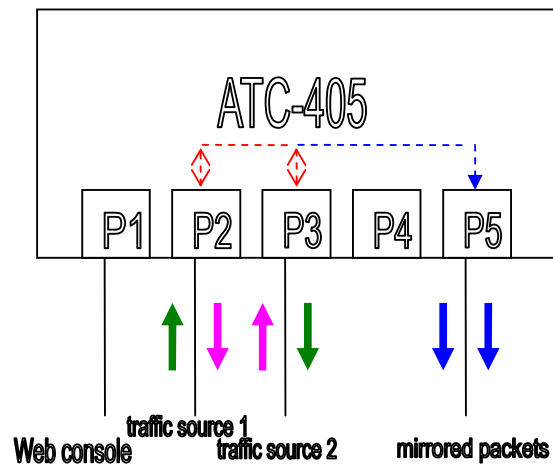


The image shows the configuration interface for a '5-Port 10/100Mbps Fast Ethernet Switch'. The 'Port Mirroring' section is active, and the 'Change Mirror mode' button is visible. The configuration table below shows the settings for port mirroring:

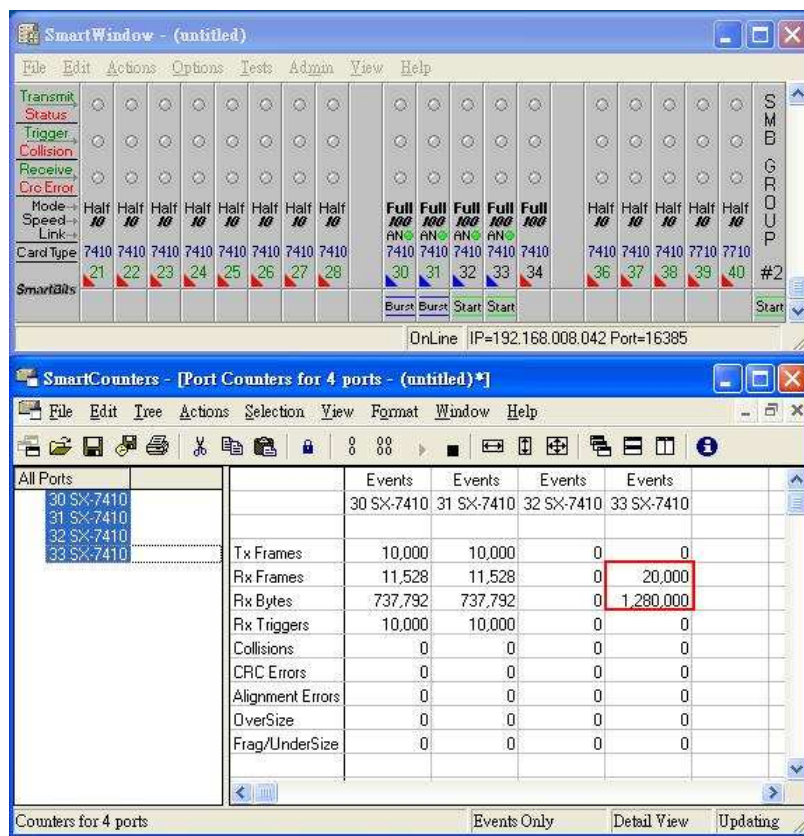
	1	2	3	4	5
Mirror Port	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Mirror Mode	Tx & Rx				
Source Port	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

The 'Update' button is located at the bottom right of the configuration table.

Traffic 1 and traffic 2 separately transmit packets to port 2 and port 3 at the same time.

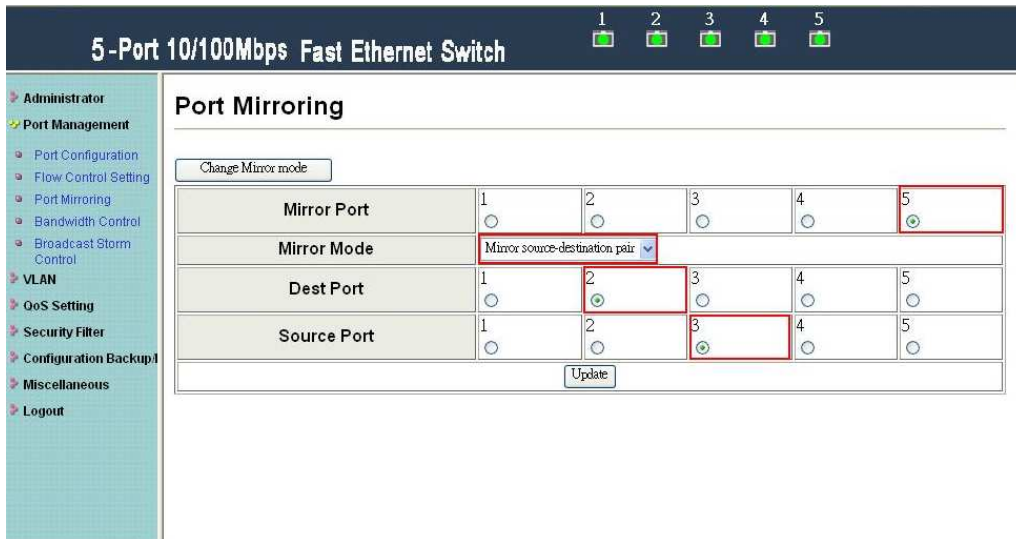


GC-ATC-405 copies egress and ingress packets of port 3 to port 5.



TX and RX (one port of TX & RX must be the different)

After changing mirror mode, set port 3 as source port, port 2 as destination port and port 5 as mirror port.



5-Port 10/100Mbps Fast Ethernet Switch

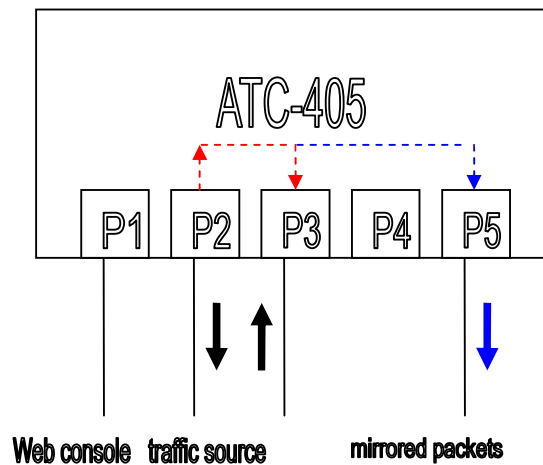
Port Mirroring

Change Mirror mode

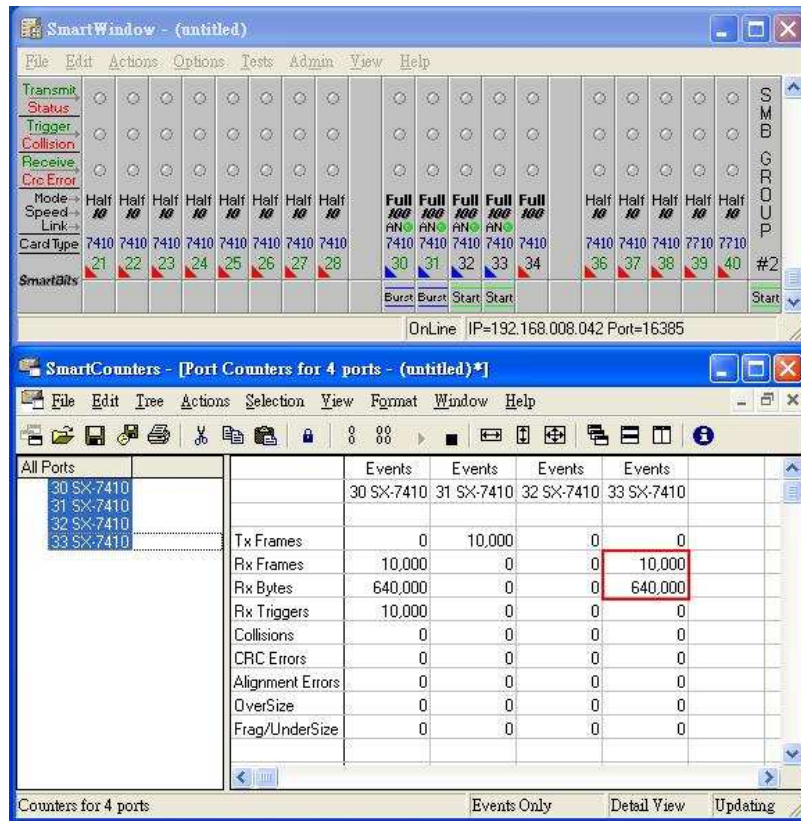
Mirror Port	1	2	3	4	5
Mirror Mode	Mirror source-destination pair				
Dest Port	1	2	3	4	5
Source Port	1	2	3	4	5

Update

The SmartBits transmits packets to port 3.



When port 3 forwards packets to port 2, GC-ATC-405 will copy packets of the path to port 5.



The screenshot displays two software windows from the GridConnect suite. The top window, 'SmartWindow - (untitled)', shows a network configuration interface with various status indicators and a 'SmartBits' section. The bottom window, 'SmartCounters - [Port Counters for 4 ports - (untitled)*]', displays a table of network statistics for four ports (30 SX-7410, 31 SX-7410, 32 SX-7410, and 33 SX-7410). The table includes columns for Tx Frames, Rx Frames, Rx Bytes, Rx Triggers, Collisions, CRC Errors, Alignment Errors, OverSize, and Frag/UnderSize. The values for Rx Bytes are 0, 10,000, 0, and 640,000 respectively, with the last value (640,000) highlighted in red. The status bar at the bottom indicates 'Counters for 4 ports', 'Events Only', 'Detail View', and 'Updating'.

Port	Tx Frames	Rx Frames	Rx Bytes	Rx Triggers	Collisions	CRC Errors	Alignment Errors	OverSize	Frag/UnderSize
30 SX-7410	0	10,000	0	0	0	0	0	0	0
31 SX-7410	10,000	0	0	10,000	0	0	0	0	0
32 SX-7410	640,000	0	0	0	0	0	0	0	0
33 SX-7410	10,000	0	0	0	0	0	0	0	0

2.4 Bandwidth Control

This page allows the user to set the bandwidth for each port. The TX rate and Rx rate can be adjusted with the number ranging from 0 to 3124 (0 for 100Mbps).

Adjust the of TX or RX rate of the selected port and press the “Update” button.

5-Port 10/100Mbps Fast Ethernet Switch

12345

Administrator
Port Management
 Port Configuration
 Flow Control Setting
 Port Mirroring
 Bandwidth Control
 Broadcast Storm Control
VLAN
 QoS Setting
 Security Filter
 Configuration Backup
 Miscellaneous
 Logout

Bandwidth Control

Port No	Tx Rate	Rx Rate
5	(0~3124) 1000 x32Kbps 0 for 100Mbps	(0~3124) x32Kbps 0 for 100Mbps

Port No	Tx Rate	Rx Rate
1	100Mbps	100Mbps
2	100Mbps	100Mbps
3	100Mbps	100Mbps
4	100Mbps	100Mbps
5	100Mbps	100Mbps

After updating, the value is adjusted next to the port number.

5-Port 10/100Mbps Fast Ethernet Switch

12345

Administrator
Port Management
 Port Configuration
 Flow Control Setting
 Port Mirroring
 Bandwidth Control
 Broadcast Storm Control
VLAN
 QoS Setting
 Security Filter
 Configuration Backup
 Miscellaneous
 Logout

Bandwidth Control

Port No	Tx Rate	Rx Rate
1	(0~3124) x32Kbps 0 for 100Mbps	(0~3124) x32Kbps 0 for 100Mbps






Port No	Tx Rate	Rx Rate
1	100Mbps	100Mbps
2	100Mbps	100Mbps
3	100Mbps	100Mbps
4	100Mbps	100Mbps
5	32.000Mbps	100Mbps

2.5 Broadcast Storm Control

The broadcast storm control is used to block excessive broadcast packets. The threshold ranges from 1 to 255.

The broadcast storm of port 2 is enabled and threshold is set to 8. The broadcast packets will be dropped when broadcast packets are more than threshold setting (packet length is 64 bytes).

5-Port 10/100Mbps Fast Ethernet Switch

1 
2 
3 
4 
5 

- Administrator
- Port Management
 - Port Configuration
 - Flow Control Setting
 - Port Mirroring
 - Bandwidth Control
 - Broadcast Storm Control
- VLAN
- QoS Setting
- Security Filter
- Configuration Backup
- Miscellaneous
- Logout

Broadcast Storm Protection

Port No.	Broadcast Storm	Include Multicast	Threshold(1~255)
2	Enable		8

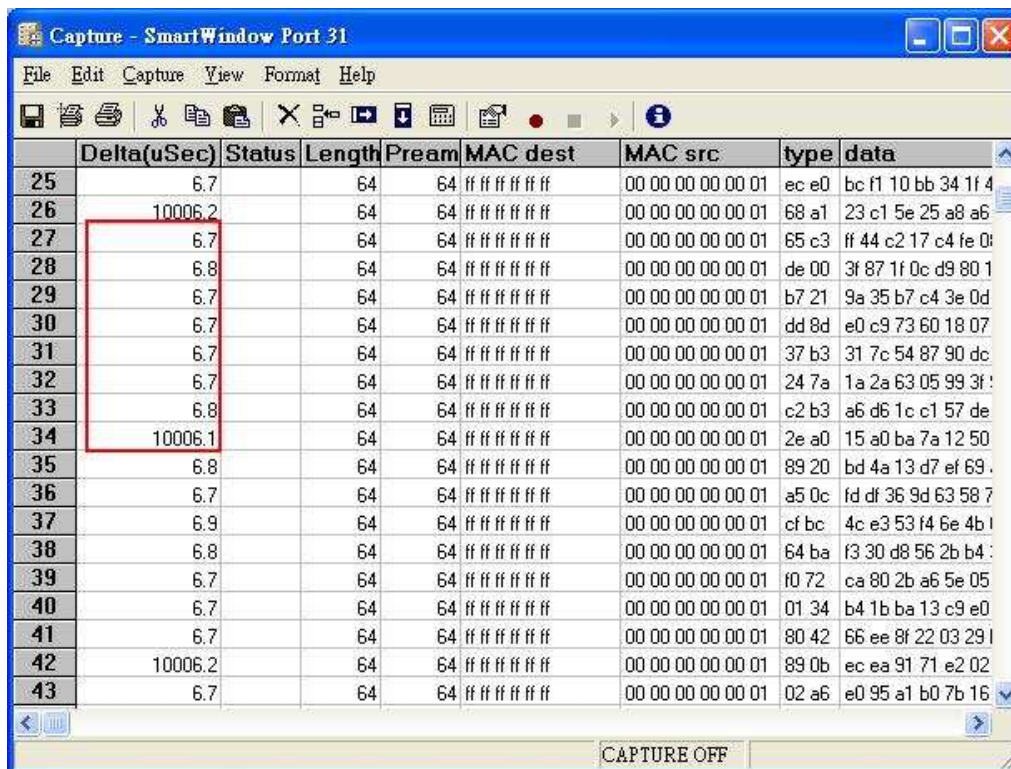
Note 1: Broadcast Storm = Enable, drop the incoming packet if the number of queued broadcast packet is over the threshold.

Note 2: Include Multicast = Enable, "broadcast storm protection" includes multicast packets, 0xFFFFFFFF or multi-cast address. Include Multicast = Disable, "broadcast storm protection" does not include multicast packets.

Port No.	Broadcast Storm	Include Multicast	Threshold
1	Disable	Disable	8
2	Enable	Disable	8
3	Disable	Disable	8
4	Disable	Disable	8
5	Disable	Disable	8

100M mode

The smart bit transmits broadcast packets to port 2. Port 2 of the GC-ATC-405 will drop excessive packets if the broadcast packets get up to threshold value in unit time. Unit time: 10ms for 100Mbps mode.



	Delta(uSec)	Status	Length	Pream	MAC dest	MAC src	type	data
25	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	ec e0	bc f1 10 bb 34 1f 4
26	10006.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	68 a1	23 c1 5e 25 a8 a6
27	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	65 c3	ff 44 c2 17 c4 fe 0
28	6.8		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	de 00	3f 87 1f 0c d9 80 1
29	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	b7 21	9a 35 b7 c4 3e 0d
30	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	dd 8d	e0 c9 73 60 18 07
31	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	37 b3	31 7c 54 87 90 dc
32	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	24 7a	1a 2a 63 05 99 3f :
33	6.8		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	c2 b3	a6 d6 1c c1 57 de
34	10006.1		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	2e a0	15 a0 ba 7a 12 50
35	6.8		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	89 20	bd 4a 13 d7 ef 69 .
36	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	a5 0c	fd df 36 9d 63 58 7
37	6.9		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	cf bc	4c e3 53 f4 6e 4b l
38	6.8		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	64 ba	f3 30 d8 56 2b b4 :
39	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	f0 72	ca 80 2b a6 5e 05
40	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	01 34	b4 1b ba 13 c9 e0
41	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	80 42	66 ee 8f 22 03 29 l
42	10006.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	89 0b	ec ea 91 71 e2 02
43	6.7		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	02 a6	e0 95 a1 b0 7b 16













CAPTURE OFF

10M mode

The smart bit transmits broadcast packets to port 2. Port 2 will drop excessive packets in unit time. Unit time: 100ms for 10Mbps mode.

Capture - SmartWindow Port 31

File Edit Capture View Format Help

	Delta(uSec)	Status	Length	Pream	MAC dest	MAC src	type	data
8	67.1		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	4c c8	b5 54 84 07 dc df
9	100061.9		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	22 6c	70 09 b8 71 83 92
10	67.1		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	03 5b	95 e9 6b eb dc 97
11	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	ef 2f	c6 af 14 37 4d b6
12	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	24 ea	37 62 ca 24 23 8e
13	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	7f d8	24 de c4 02 9f dd
14	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	a8 7f	b6 1a 6e 51 15 da
15	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	f1 bd	57 9c 17 da 87 c8
16	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	d9 71	f8 10 8d a0 7f 63
17	100062.0		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	ca 69	27 1e 4d dc 14 90
18	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	ab 92	dc 64 6c f5 68 b0
19	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	27 6e	53 ac da 9b 13 6e
20	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	47 5d	8f ca c8 91 36 a4
21	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	79 14	a4 25 fe fb a6 7b
22	67.1		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	c4 b4	83 b5 db 50 8f 72
23	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	75 20	29 74 5b 1f 00 e3
24	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	db 35	15 42 16 42 ff 84
25	100061.8		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	3c 07	9c c2 d0 df e6 2c
26	67.2		64	64	ff ff ff ff ff ff	00 00 00 00 00 01	de 5d	a9 57 e8 3e aa 08

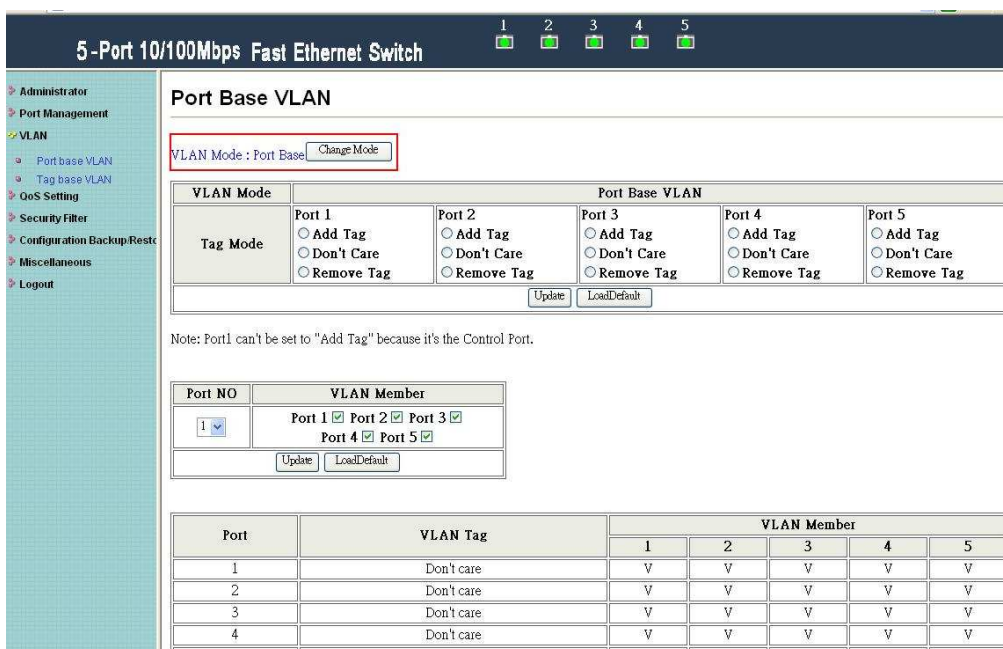
CAPTURE OFF

3 VLAN Setting

3.1 VLAN mode

GC-ATC-405 supports two VLAN modes, tag based and port based. When the port based VLAN is selected, the tag setting will be useless. When the tag based or port based VLAN is selected, the user can define the handling method of a VLAN tag to the specified port, including “add a VLAN tag”, “remove a VLAN tag” or “don’t care” about VLAN tag.

VLAN mode supports port based and tag based mode. Press “Change Mode” button to change VLAN mode.



5-Port 10/100Mbps Fast Ethernet Switch

Port Base VLAN

VLAN Mode: Port Base [Change Mode](#)

VLAN Mode	Port 1	Port 2	Port 3	Port 4	Port 5
Tag Mode	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag

[Update](#) [LoadDefault](#)

Note: Port1 can't be set to "Add Tag" because it's the Control Port.

Port NO	VLAN Member
1	Port 1 <input checked="" type="checkbox"/> Port 2 <input checked="" type="checkbox"/> Port 3 <input checked="" type="checkbox"/> Port 4 <input checked="" type="checkbox"/> Port 5 <input checked="" type="checkbox"/>

[Update](#) [LoadDefault](#)

Port	VLAN Tag	VLAN Member				
		1	2	3	4	5
1	Don't care	V	V	V	V	V
2	Don't care	V	V	V	V	V
3	Don't care	V	V	V	V	V
4	Don't care	V	V	V	V	V
5	Don't care	V	V	V	V	V

The egress packets of the output port will be added tag if add tag option is selected. The egress packets of the output will be stripped tag if remove tag option is selected. Don't care means the egress packets of the output port only forward to destination without adding or removing tag.

3.2 Port based VLAN

Add tag

Select “add tag” for port 2~5 and press “Update” button.

5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

Port Base VLAN

VLAN Mode : Port Base [Change Mode](#)

VLAN Mode	Port 1	Port 2	Port 3	Port 4	Port 5
Tag Mode	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag

[Update](#) [LoadDefault](#)

Note: Port1 can't be set to "Add Tag" because it's the Control Port.

Port NO	VLAN Member
1	Port 1 <input checked="" type="checkbox"/> Port 2 <input checked="" type="checkbox"/> Port 3 <input checked="" type="checkbox"/> Port 4 <input checked="" type="checkbox"/> Port 5 <input checked="" type="checkbox"/>

[Update](#) [LoadDefault](#)

Port	VLAN Tag	VLAN Member				
		1	2	3	4	5
1	Don't care	V	V	V	V	V
2	Don't care	V	V	V	V	V
3	Don't care	V	V	V	V	V
4	Don't care	V	V	V	V	V
5	Don't care	V	V	V	V	V

After updating, the message of “add tag” is showed in VLAN tag field.

5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

Port Base VLAN

VLAN Mode : Port Base [Change Mode](#)

VLAN Mode	Port 1	Port 2	Port 3	Port 4	Port 5
Tag Mode	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag

[Update](#) [LoadDefault](#)

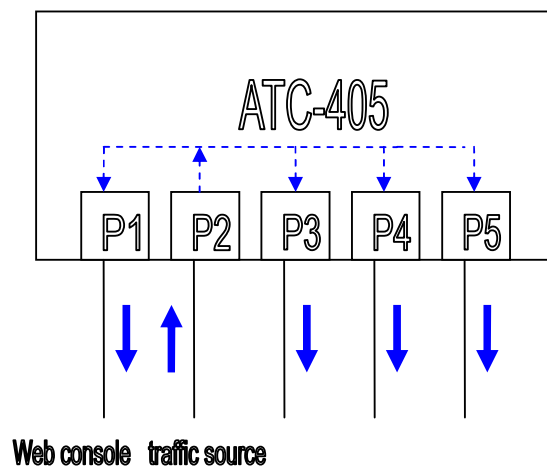
Note: Port1 can't be set to "Add Tag" because it's the Control Port.

Port NO	VLAN Member
1	Port 1 <input checked="" type="checkbox"/> Port 2 <input checked="" type="checkbox"/> Port 3 <input checked="" type="checkbox"/> Port 4 <input checked="" type="checkbox"/> Port 5 <input checked="" type="checkbox"/>

[Update](#) [LoadDefault](#)

Port	VLAN Tag	VLAN Member				
		1	2	3	4	5
1	Don't care	V	V	V	V	V
2	Add Tag	V	V	V	V	V
3	Add Tag	V	V	V	V	V
4	Add Tag	V	V	V	V	V
5	Add Tag	V	V	V	V	V

The SmartBits transmits 64byte broadcast packets without tag to port 2.



SmartWindow - (untitled)

Transmit	Status	Trigger	Collision	Receive	Crc Error	Mode	Speed	Link	Card Type	SmartBits
Half	10	Half	10	Half	10	Half	10	Half	10	Full
21	22	23	24	25	26	27	28	30	31	32
33	34	36	37	38	39	40				

OnLine IP=192.168.008.042 Port=16385

SmartCounters - [Port Counters for 4 ports - (untitled)*]

All Ports	Events	Events	Events	Events
30 SX-7410	31 SX-7410	32 SX-7410	33 SX-7410	
Tx Frames	10,000	0	0	0
Rx Frames	0	10,000	10,000	10,000
Rx Bytes	0	680,000	680,000	680,000
Rx Triggers	0	0	0	0
Collisions	0	0	0	0
CRC Errors	0	0	0	0
Alignment Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Counters for 4 ports Events Only Detail View Updating

The captured packets of 31 SX-7410 are added tag with 8100 0001.

Figure 1: Packet capture showing 19 captured packets. The packets are captured on SmartWindow Port 31. The capture shows a sequence of frames with a consistent MAC destination (64 ff ff ff ff ff) and MAC source (00 00 00 00 00 01). The data field shows a sequence of bytes, including a tag (81 00 00 01) and a sequence of data bytes (67 2e ff be 7, b2 bf 4d 58, 7c ab bb 68, 95 5f af 83 e, c9 2c af c8 l, 10 96 b2 bf l, 24 7c c4 2a, 71 1c 1f c6 C, e9 75 65 1c, a0 10 cc ba, d0 a3 e3 dc, 0c f1 1a b6 l, 3b 0d 2f a5 i, 61 44 5d 6d, 30 ea c4 4b, cc 08 ac 4d, 4b d1 dd 73, 88 be 76 06, 9d aa 64 eb).

	Delta(uSec)	Status	Length	Pream	MAC dest	MAC src	type	data
1	0.0		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 67 2e ff be 7
2	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 b2 bf 4d 58 :
3	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 7c ab bb 68
4	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 95 5f af 83 e
5	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 c9 2c af c8 l
6	67.4		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 10 96 b2 bf l
7	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 24 7c c4 2a
8	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 71 1c 1f c6 C
9	67.1		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 e9 75 65 1c
10	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 a0 10 cc ba
11	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 d0 a3 e3 dc
12	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 0c f1 1a b6 l
13	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 3b 0d 2f a5 i
14	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 61 44 5d 6d
15	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 30 ea c4 4b
16	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 cc 08 ac 4d
17	67.1		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 4b d1 dd 73
18	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 88 be 76 06
19	67.2		68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 01 9d aa 64 eb

CAPTURE OFF

Remove tag

Select "remove tag" for port 2-5 and press "Update" button.

5-Port 10/100Mbps Fast Ethernet Switch

Port Base VLAN

VLAN Mode : Port Base [Change Mode](#)

VLAN Mode	Port 1	Port 2	Port 3	Port 4	Port 5
Tag Mode	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input checked="" type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input checked="" type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input checked="" type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input checked="" type="radio"/> Remove Tag

[Update](#) [LoadDefault](#)

Note: Port1 can't be set to "Add Tag" because it's the Control Port.

Port NO	VLAN Member
1	Port 1 <input checked="" type="checkbox"/> Port 2 <input checked="" type="checkbox"/> Port 3 <input checked="" type="checkbox"/> Port 4 <input checked="" type="checkbox"/> Port 5 <input checked="" type="checkbox"/>

[Update](#) [LoadDefault](#)

Port	VLAN Tag	VLAN Member				
		1	2	3	4	5
1	Don't care	V	V	V	V	V
2	Add Tag	V	V	V	V	V
3	Add Tag	V	V	V	V	V
4	Add Tag	V	V	V	V	V
5	Add Tag	V	V	V	V	V

After updating, the message of “remove tag” is showed in the VLAN tag field.

5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

Port Base VLAN

VLAN Mode : Port Base

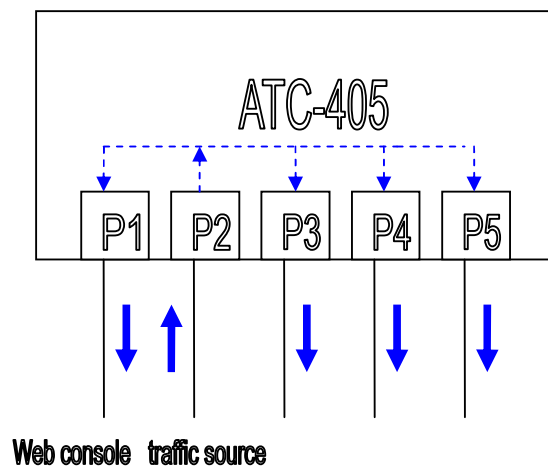
VLAN Mode	Port 1	Port 2	Port 3	Port 4	Port 5
Tag Mode	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag

Note: Port1 can't be set to "Add Tag" because it's the Control Port.

Port NO	VLAN Member
1	Port 1 <input checked="" type="checkbox"/> Port 2 <input checked="" type="checkbox"/> Port 3 <input checked="" type="checkbox"/> Port 4 <input checked="" type="checkbox"/> Port 5 <input checked="" type="checkbox"/>

Port	VLAN Tag	VLAN Member				
		1	2	3	4	5
1	Don't care	V	V	V	V	V
2	Remove Tag	V	V	V	V	V
3	Remove Tag	V	V	V	V	V
4	Remove Tag	V	V	V	V	V
5	Remove Tag	V	V	V	V	V

The SmartBits transmits 68byte broadcast packets with 8100 0001 to port 2.



SmartWindow - (untitled)

File Edit Actions Options Tests Admin View Help

Transmit Status Trigger Collision Receive Crc Error

Mode Speed Link

Card Type

SmartBills

Single Burst

OnLine IP=192.168.008.042 Port=16385

SmartCounters - [Port Counters for 4 ports - (untitled)*]

File Edit Tree Actions Selection View Format Window Help

All Ports

	Events	Events	Events	Events
	30 SX-7410	31 SX-7410	32 SX-7410	33 SX-7410
Tx Frames	10,000	0	0	0
Rx Frames	0	10,000	10,000	10,000
Rx Bytes	0	640,000	640,000	640,000
Rx Triggers	0	0	0	0
Collisions	0	0	0	0
CRC Errors	0	0	0	0
Alignment Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Counters for 4 ports

Events Only Detail View Updating

The captured packets of 31 SX-7410 are removed tag.

Capture - SmartWindow Port 31

File Edit Capture View Format Help

	Delta(uSec)	Status	Length	Pream	MAC dest	MAC src	type	data
1	0.0		64	64	ff ff ff ff ff	00 00 00 00 00 01	e0 3d	66 18 76 5a 97 42
2	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	1e 8a	14 0c ec 56 76 99
3	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	fe cb	ca 1b b2 6e 49 00
4	67.1		64	64	ff ff ff ff ff	00 00 00 00 00 01	4a d7	fa f7 eb da af f6 0e
5	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	ea ac	4a 02 5b af 6d 8b 1
6	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	33 bc	a7 dd eb c5 f9 36
7	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	31 11	4e 37 e3 ee 2c 86
8	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	c3 d0	ff 62 0c 37 3b ae f
9	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	bd cc	70 df bd 29 eb e7
10	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	fe 78	b6 73 89 e1 bf 52
11	67.1		64	64	ff ff ff ff ff	00 00 00 00 00 01	ae e3	9f b1 f6 69 0e 23 e
12	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	e5 47	ce 4d 82 1f 40 7c
13	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	f8 2f	06 40 0c 8c 7d 46
14	67.4		64	64	ff ff ff ff ff	00 00 00 00 00 01	d3 a3	15 1a 7c 92 55 88
15	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	9f d8	d0 d9 bc 2c 88 63
16	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	0a 5d	86 7d 48 6d d4 5d
17	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	a1 ab	5f d6 fc 5a 6f 11 1
18	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	6d 0b	94 cc 61 4f fd ed f
19	67.2		64	64	ff ff ff ff ff	00 00 00 00 00 01	6c 70	a7 b8 d9 f5 3a 18

CAPTURE OFF

VLAN member setting

Choose port 1-3 as VLAN members of port 2 and press “Update” button.

5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

Port Base VLAN

VLAN Mode : Port Base [Change Mode](#)

VLAN Mode	Port 1	Port 2	Port 3	Port 4	Port 5
Tag Mode	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag

[Update](#) [LoadDefault](#)

Note: Port1 can't be set to "Add Tag" because it's the Control Port.

Port NO	VLAN Member
2	Port 1 <input checked="" type="checkbox"/> Port 2 <input checked="" type="checkbox"/> Port 3 <input checked="" type="checkbox"/> Port 4 <input type="checkbox"/> Port 5 <input type="checkbox"/>

[Update](#) [LoadDefault](#)

Port	VLAN Tag	VLAN Member				
		1	2	3	4	5
1	Don't care	V	V	V	V	V
2	Remove Tag	V	V	V	V	V
3	Remove Tag	V	V	V	V	V
4	Remove Tag	V	V	V	V	V

After updating, VLAN member field appears that port 1-3 are in the same VLAN group.

5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

Port Base VLAN

VLAN Mode : Port Base [Change Mode](#)

VLAN Mode	Port 1	Port 2	Port 3	Port 4	Port 5
Tag Mode	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input checked="" type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag	<input type="radio"/> Add Tag <input type="radio"/> Don't Care <input type="radio"/> Remove Tag

[Update](#) [LoadDefault](#)

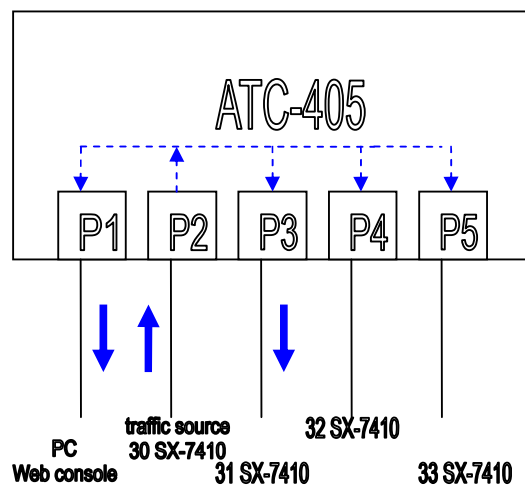
Note: Port1 can't be set to "Add Tag" because it's the Control Port.

Port NO	VLAN Member
1	Port 1 <input checked="" type="checkbox"/> Port 2 <input checked="" type="checkbox"/> Port 3 <input checked="" type="checkbox"/> Port 4 <input checked="" type="checkbox"/> Port 5 <input checked="" type="checkbox"/>

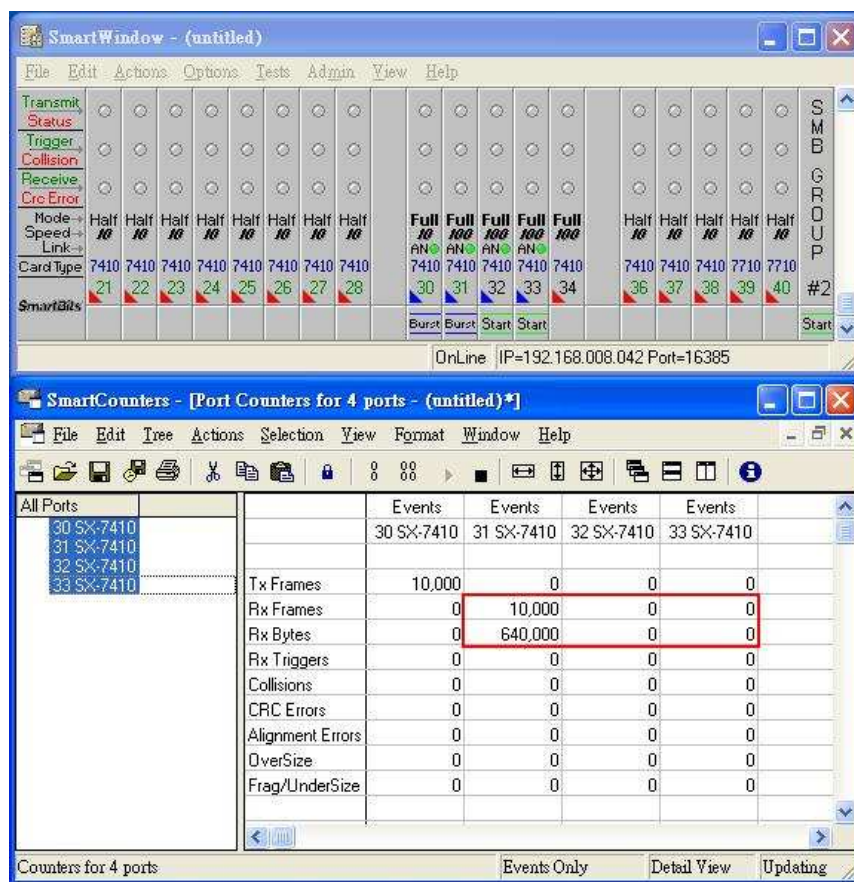
[Update](#) [LoadDefault](#)

Port	VLAN Tag	VLAN Member				
		1	2	3	4	5
1	Don't care	V	V	V	V	V
2	Remove Tag	V	V	V	-	-
3	Remove Tag	V	V	V	V	V
4	Remove Tag	V	V	V	V	V
5	Remove Tag	V	V	V	V	V

The SmartBits transmits 64byte broadcast packets from source port 2.



Port 4 and port 5 have not received any packets.



3.3 Tag based VLAN

This page is used to set the VLAN ID. The VLAN ID is valid only when the tag based VLAN is enabled. In port based VLAN mode, the VLAN ID is useless.

Press “Change Mode” button to use tag based VLAN.

5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

- Administrator
- Port Management
- VLAN**
 - Port base VLAN
 - Tag base VLAN
- QoS Setting
- Security Filter
- Configuration Backup-Restore
- Miscellaneous
- Logout

Tag Base VLAN

VLAN Mode : Port Base Change Mode

VLAN No	Enable	VID (1~4093)	FID (0~15)	Add Tag	Remove Tag	VLAN Member
0	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	P1 <input type="checkbox"/> P2 <input type="checkbox"/> P3 <input type="checkbox"/> P4 <input type="checkbox"/> P5 <input type="checkbox"/>	P1 <input type="checkbox"/> P2 <input type="checkbox"/> P3 <input type="checkbox"/> P4 <input type="checkbox"/> P5 <input type="checkbox"/>	P1 <input checked="" type="checkbox"/> P2 <input checked="" type="checkbox"/> P3 <input checked="" type="checkbox"/> P4 <input checked="" type="checkbox"/> P5 <input checked="" type="checkbox"/>

Submit LoadDefault

PVID	PVID Value is (1~4093)				
	P1	P2	P3	P4	P5
Port/PVID	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Submit LoadDefault

VLAN NO	Enable	VID	FID	VLAN Member					Add Tag					Remove Tag					
				P1	P2	P3	P4	P5	P1	P2	P3	P4	P5	P1	P2	P3	P4	P5	
0	X	1	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
1	X	2	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
2	X	3	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
3	X	4	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
4	X	5	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
5	X	6	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Enable VLAN 0, VID=175 and p5 is added tag. Then press “Submit” button.

5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

- Administrator
- Port Management
- VLAN**
 - Port base VLAN
 - Tag base VLAN
- QoS Setting
- Security Filter
- Configuration Backup-Restore
- Miscellaneous
- Logout

Tag Base VLAN

VLAN Mode : Tag Base Change Mode

VLAN No	Enable	VID (1~4093)	FID (0~15)	Add Tag	Remove Tag	VLAN Member
0	Enable	175	<input type="text"/>	P1 <input type="checkbox"/> P2 <input type="checkbox"/> P3 <input type="checkbox"/> P4 <input type="checkbox"/> P5 <input checked="" type="checkbox"/>	P1 <input type="checkbox"/> P2 <input type="checkbox"/> P3 <input type="checkbox"/> P4 <input type="checkbox"/> P5 <input type="checkbox"/>	P1 <input checked="" type="checkbox"/> P2 <input checked="" type="checkbox"/> P3 <input checked="" type="checkbox"/> P4 <input checked="" type="checkbox"/> P5 <input checked="" type="checkbox"/>

Submit LoadDefault

PVID	PVID Value is (1~4093)				
	P1	P2	P3	P4	P5
Port/PVID	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Submit LoadDefault

VLAN NO	Enable	VID	FID	VLAN Member					Add Tag					Remove Tag					
				P1	P2	P3	P4	P5	P1	P2	P3	P4	P5	P1	P2	P3	P4	P5	
0	X	1	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
1	X	2	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
2	X	3	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
3	X	4	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
4	X	5	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-	-
5	X	6	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Set PVID of p2 to be 175 and press “Submit” button.

5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Administrator
Port Management
VLAN
Port base VLAN
Tag base VLAN
QoS Setting
Security Filter
Configuration Backup/Restore
Miscellaneous
Logout

Tag Base VLAN

VLAN Mode: Tag Base [Change Mode](#)

VLAN No	Enable	VID (1~4093)	FID (0~15)	Add Tag	Remove Tag	VLAN Member
0	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	P1 <input type="checkbox"/> P2 <input type="checkbox"/> P3 <input type="checkbox"/> P4 <input type="checkbox"/> P5 <input type="checkbox"/>	P1 <input type="checkbox"/> P2 <input type="checkbox"/> P3 <input type="checkbox"/> P4 <input type="checkbox"/> P5 <input type="checkbox"/>	P1 <input checked="" type="checkbox"/> P2 <input checked="" type="checkbox"/> P3 <input checked="" type="checkbox"/> P4 <input checked="" type="checkbox"/> P5 <input checked="" type="checkbox"/>

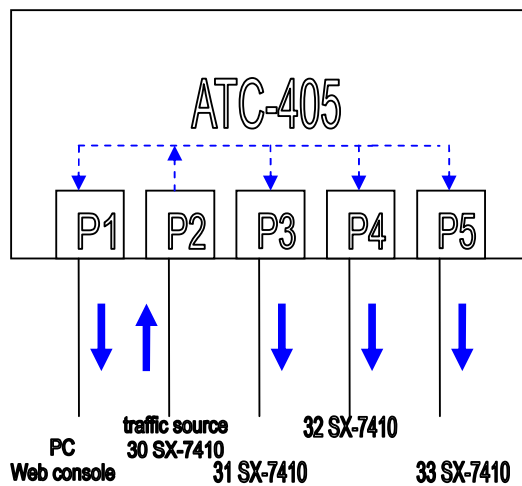
[Submit](#) [LoadDefault](#)

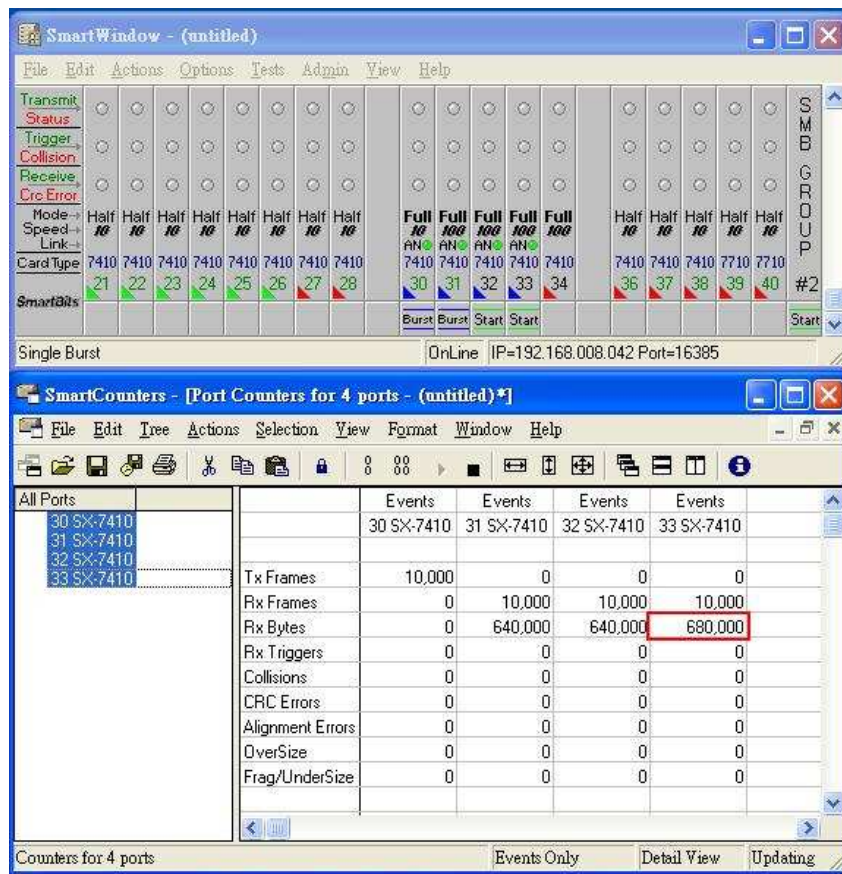
PVID	PVID Value is (1~4093)				
	P1	P2	P3	P4	P5
Port/PVID	1	175	1	1	1

[Submit](#) [LoadDefault](#)

VLAN NO	Enable	VID	FID	VLAN Member					Add Tag					Remove Tag				
				P1	P2	P3	P4	P5	P1	P2	P3	P4	P5	P1	P2	P3	P4	P5
0	O	175	0	V	V	V	V	V	-	-	-	-	V	-	-	-	-	-
1	X	2	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-
2	X	3	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-
3	X	4	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-
4	X	5	0	V	V	V	V	V	-	-	-	-	-	-	-	-	-	-
5	X	6	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

The SmartBits transmits 64byte broadcast packets.





The captured packets from port 5 are added tag.

SmartWindow Port 33

File Edit Capture View Format Help

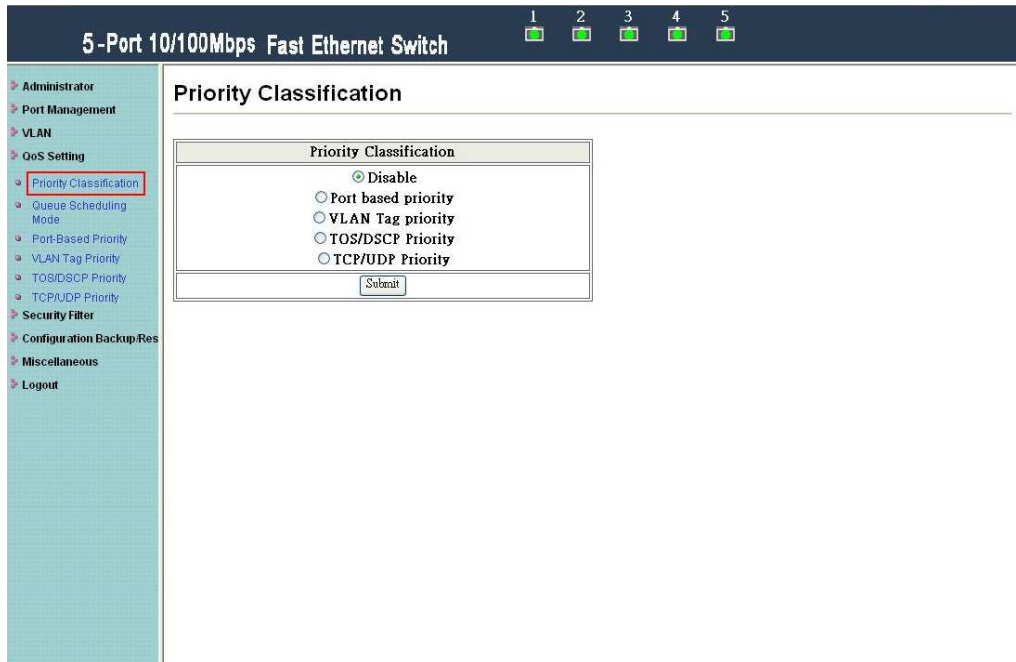
Delta(uSec) Status Length Pream MAC dest MAC src type data

19	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
20	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
21	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
22	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
23	67.1	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
24	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
25	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
26	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
27	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
28	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
29	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
30	67.1	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
31	67.5	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
32	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
33	67.1	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
34	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
35	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
36	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00
37	67.2	68	64	ff ff ff ff ff	00 00 00 00 00 01	81 00	00 af 08 00 45 00

CAPTURE OFF

4 QoS Setting

This page provides priority classification for QoS.



5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Administrator
Port Management
VLAN
QoS Setting
Priority Classification
Queue Scheduling Mode
Port-Based Priority
VLAN Tag Priority
TOS/DSCP Priority
TCP/UDP Priority
Security Filter
Configuration Backup/Res
Miscellaneous
Logout

Priority Classification

Priority Classification

☒ Disable

☐ Port based priority

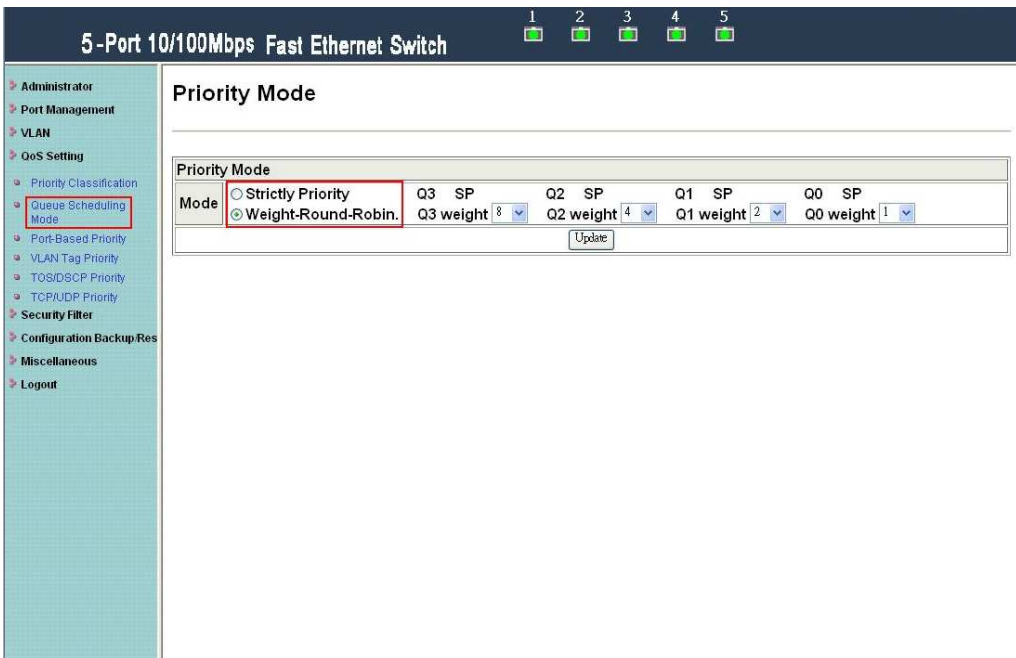
☐ VLAN Tag priority

☐ TOS/DSCP Priority

☐ TCP/UDP Priority

Submit

This page provides a option of queue scheduling including strictly priority and weight-round-robin .



5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Administrator
Port Management
VLAN
QoS Setting
Priority Classification
Queue Scheduling Mode
Port-Based Priority
VLAN Tag Priority
TOS/DSCP Priority
TCP/UDP Priority
Security Filter
Configuration Backup/Res
Miscellaneous
Logout

Priority Mode

Priority Mode

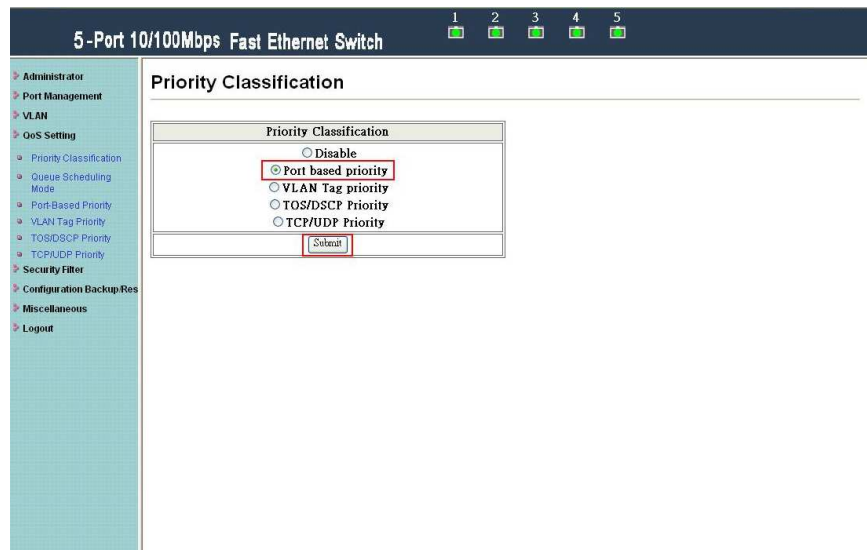
Mode ☐ Strictly Priority ☒ Weight-Round-Robin

Q3	SP	Q2	SP	Q1	SP	Q0	SP
Q3 weight 8		Q2 weight 4		Q1 weight 2		Q0 weight 1	

Update

4.1 Port based priority

Select “port based priority” and press “Submit” button.



5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Administrator
Port Management
VLAN
QoS Setting
Priority Classification
Queue Scheduling Mode
Port-Based Priority
VLAN Tag Priority
TOS/DSCP Priority
TCP/UDP Priority
Security Filter
Configuration Backup-Res
Miscellaneous
Logout

Priority Classification

Priority Classification

☐ Disable

☒ Port based priority

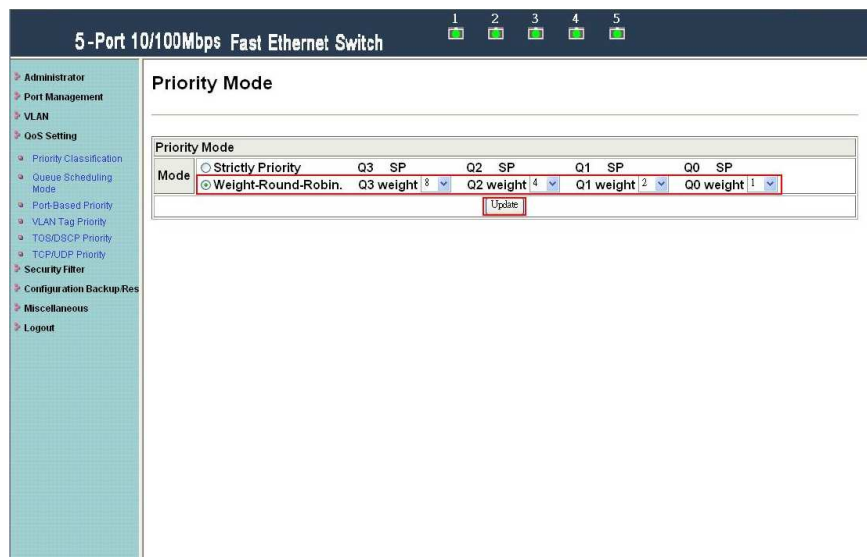
☐ VLAN Tag priority

☐ TOS/DSCP Priority

☐ TCP/UDP Priority

Submit

Select “weight-round-robin” and set Q3=8, Q2=4, Q1=2, Q0=1. Then press “Submit” button.



5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Administrator
Port Management
VLAN
QoS Setting
Priority Classification
Queue Scheduling Mode
Port-Based Priority
VLAN Tag Priority
TOS/DSCP Priority
TCP/UDP Priority
Security Filter
Configuration Backup-Res
Miscellaneous
Logout

Priority Mode

Priority Mode

Mode ☐ Strictly Priority ☒ Weight-Round-Robin

Q3	SP	Q2	SP	Q1	SP	Q0	SP
Q3 weight 8		Q2 weight 4		Q1 weight 2		Q0 weight 1	

Update

Set port 2 → queue0, port 3 → queue1, port 4 → queue2, and port 5 → queue3.

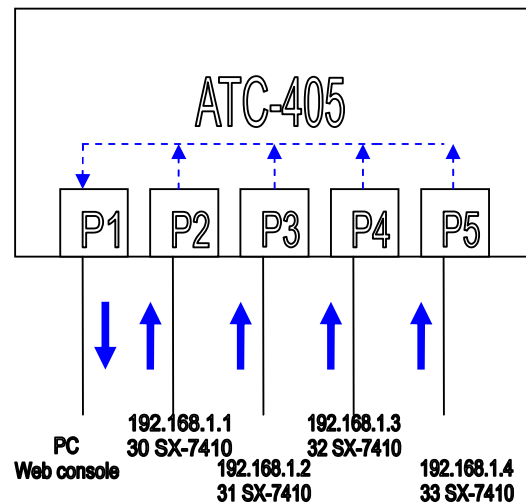
5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

Qos Port-Based Priority

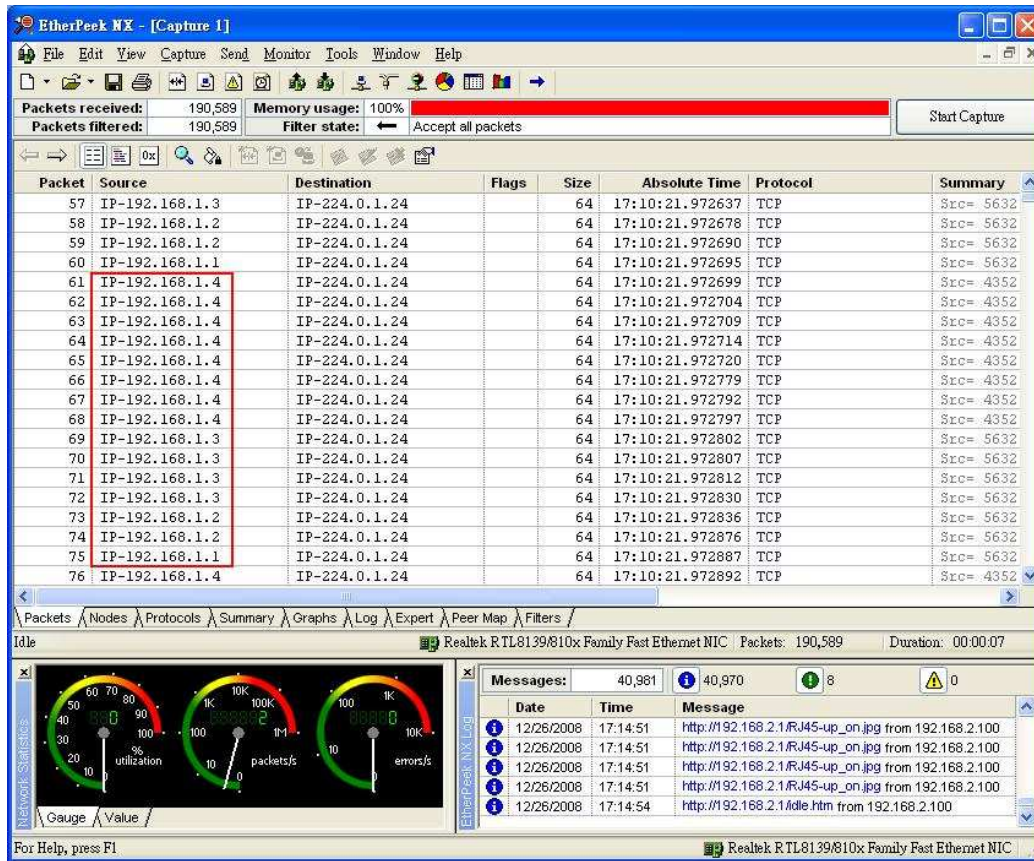
PS. The functions will work only if the selection of "Port based priority" in the webpage - Priority Classification is selected.

Port No.	Queue No.
1	Queue3
2	Queue0
3	Queue1
4	Queue2
5	Queue3

Port 2-5 forward 64byte TCP packets to port 1.

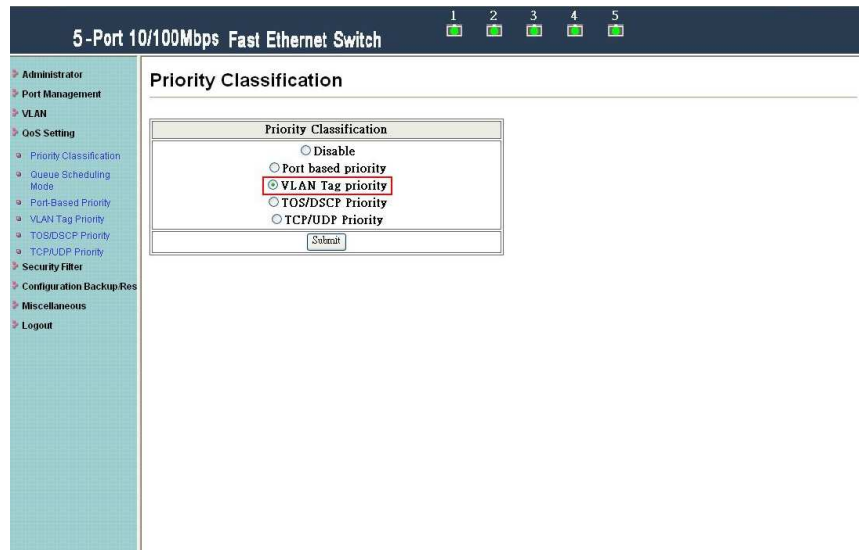


Etherpeek captures packets from port 2-5. The ratio of port 2~5 is 1:2:4:8.



4.2 VLAN tag priority

Select “VLAN tag priority” and press “Submit” button.



5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

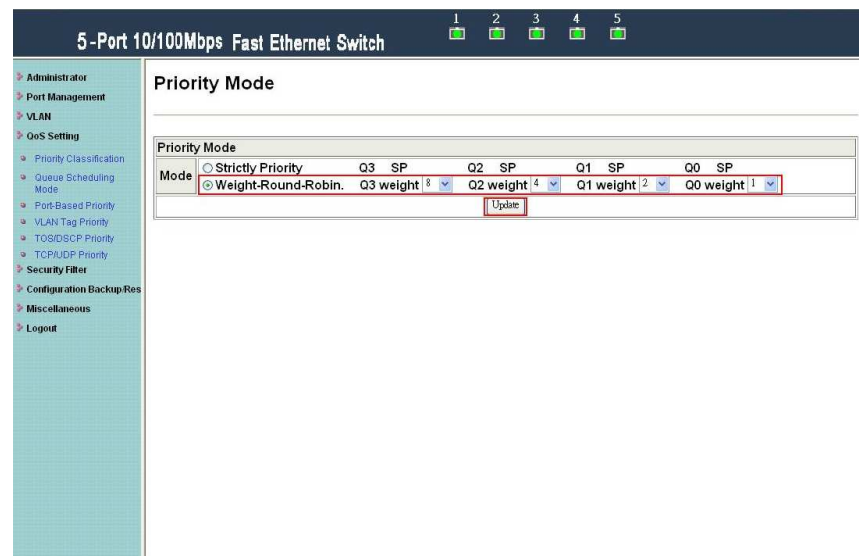
Administrator
Port Management
VLAN
QoS Setting
Priority Classification
Queue Scheduling Mode
Port-Based Priority
VLAN Tag Priority
TOS/DSCP Priority
TCP/UDP Priority
Security Filter
Configuration Backup/Res
Miscellaneous
Logout

Priority Classification

☐ Disable
☐ Port based priority
☒ VLAN Tag priority
☐ TOS/DSCP Priority
☐ TCP/UDP Priority

Submit

Select “weight-round-robin” and set Q3=8, Q2=4, Q1=2, Q0=1. Then press “Submit” button.



5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Administrator
Port Management
VLAN
QoS Setting
Priority Classification
Queue Scheduling Mode
Port-Based Priority
VLAN Tag Priority
TOS/DSCP Priority
TCP/UDP Priority
Security Filter
Configuration Backup/Res
Miscellaneous
Logout

Priority Mode

☐ Strictly Priority
☒ Weight-Round-Robin

Mode	Q3	SP	Q2	SP	Q1	SP	Q0	SP
Weight-Round-Robin	Q3 weight 8		Q2 weight 4		Q1 weight 2		Q0 weight 1	

Update

Set VLAN priority 4 → queue0, VLAN priority 5 → queue1, VLAN priority 6 → queue2 and VLAN priority 7 → queue3.

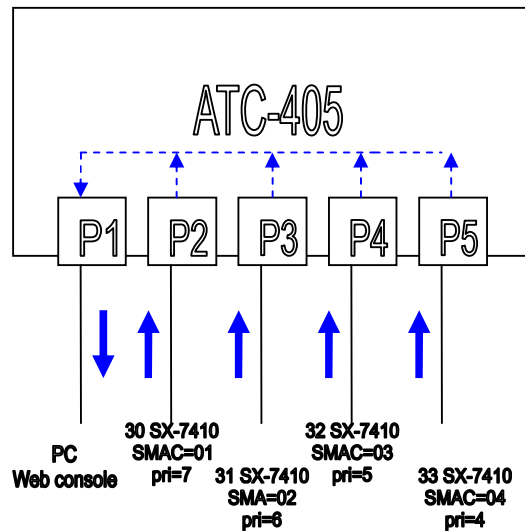
5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

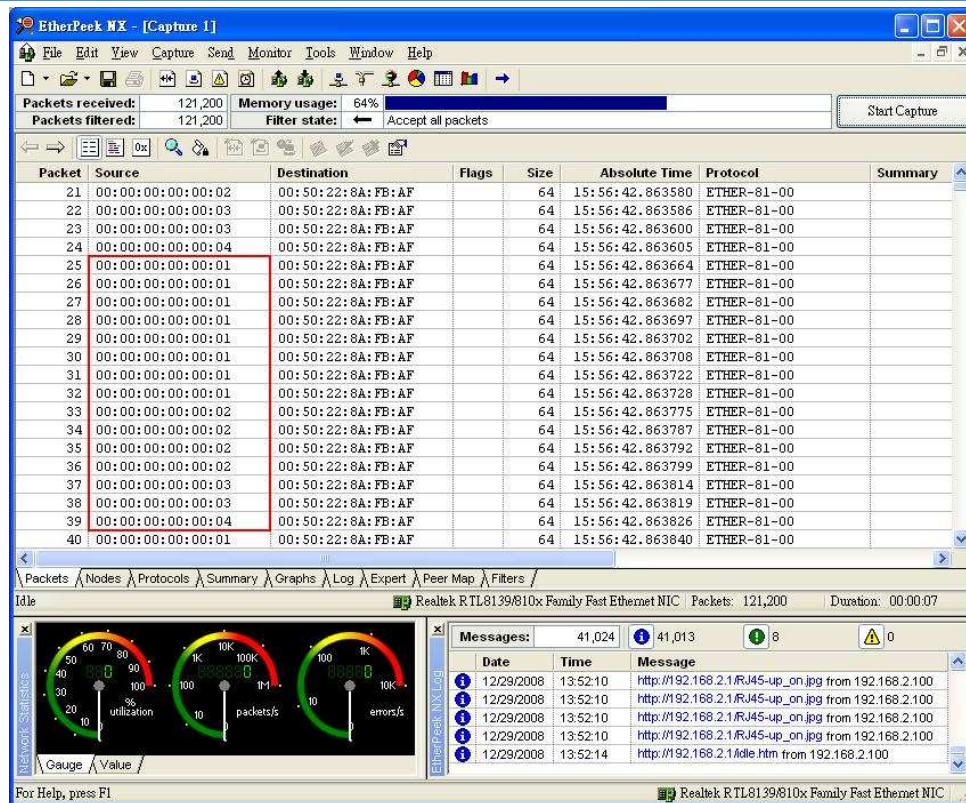
Qos Tag-Based Priority

PS. The functions will work only if the selection of "VLAN Tag priority" in the webpage - Priority Classification is selected.

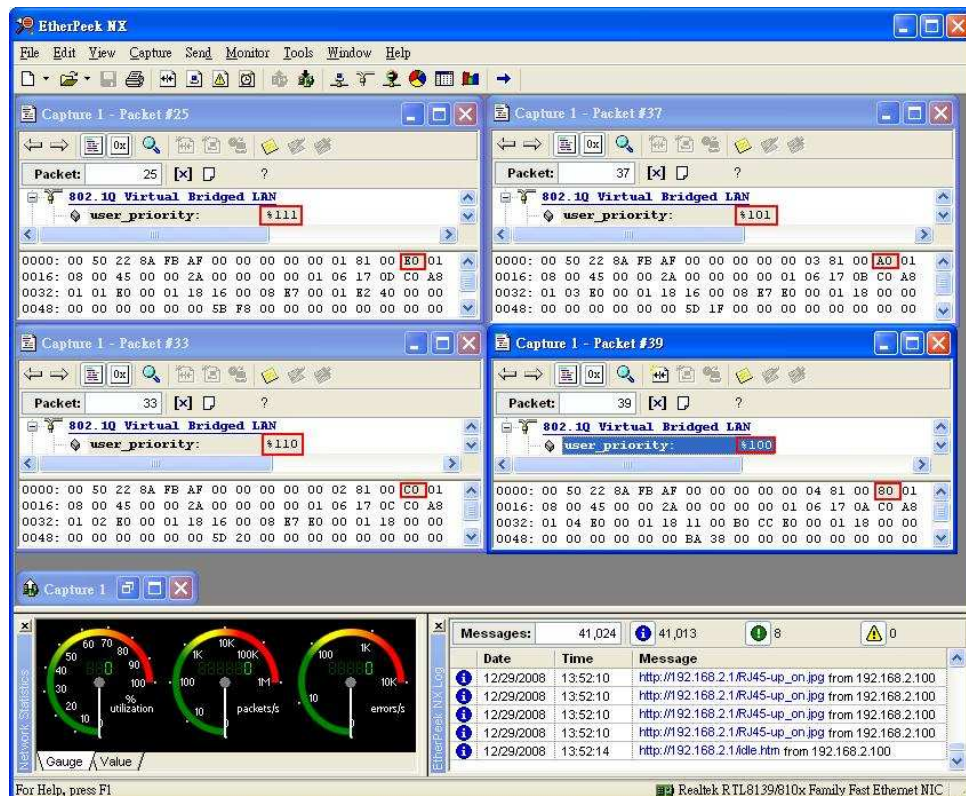
VLAN Pri	Queue No.
0	Queue0
1	Queue0
2	Queue0
3	Queue0
4	Queue0
5	Queue1
6	Queue2
7	Queue3

Port 2-5 forward unicast packets with 64byte length to port 1.



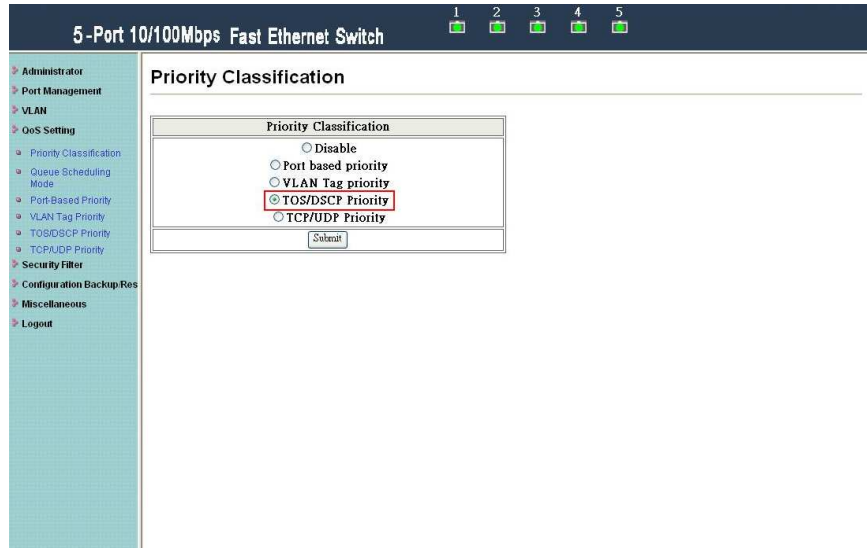


Etherpeek captures packets from port 2-5. The ratio of VLAN priority 4~7 is 1:2:4:8.



4.3 TOS/DSCP priority

Select “TOS/DSCP priority” and press “Submit” button.

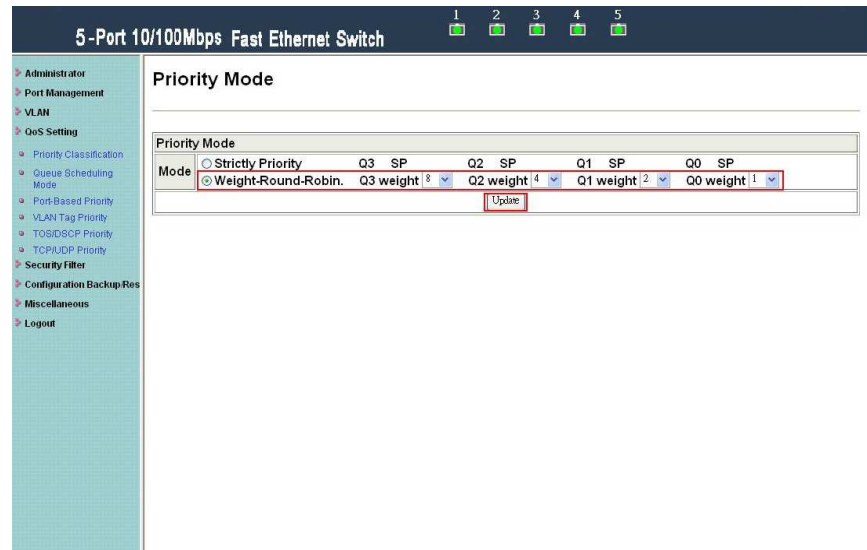


The screenshot shows the configuration page for a 5-Port 10/100Mbps Fast Ethernet Switch. The left sidebar contains a navigation menu with the following items: Administrator, Port Management, VLAN, QoS Setting, Priority Classification, Queue Scheduling Mode, Port-Based Priority, VLAN Tag Priority, TOS/DSCP Priority, TCP/UDP Priority, Security Filter, Configuration Backup/Res, Miscellaneous, and Logout. The main content area is titled "Priority Classification" and contains a form with the following options:

- ☐ Disable
- ☐ Port based priority
- ☐ VLAN Tag priority
- ☒ TOS/DSCP Priority
- ☐ TCP/UDP Priority

A "Submit" button is located at the bottom of the form.

Select “weight-round-robin” and set Q3=8, Q2=4, Q1=2, Q0=1. Then press “Submit” button.



The screenshot shows the configuration page for a 5-Port 10/100Mbps Fast Ethernet Switch. The left sidebar contains a navigation menu with the following items: Administrator, Port Management, VLAN, QoS Setting, Priority Classification, Queue Scheduling Mode, Port-Based Priority, VLAN Tag Priority, TOS/DSCP Priority, TCP/UDP Priority, Security Filter, Configuration Backup/Res, Miscellaneous, and Logout. The main content area is titled "Priority Mode" and contains a form with the following options:

- ☐ Strictly Priority
- ☒ Weight-Round-Robin

Below the radio buttons, there are four sets of weight values for Q3, Q2, Q1, and Q0. Each set consists of a label and a dropdown menu. The values are: Q3 weight 8, Q2 weight 4, Q1 weight 2, and Q0 weight 1. An "Update" button is located at the bottom of the form.

Set DSCP 7 → queue0, DSCP 6 → queue1, DSCP 5 → queue2 and DSCP 4 → queue3.

5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

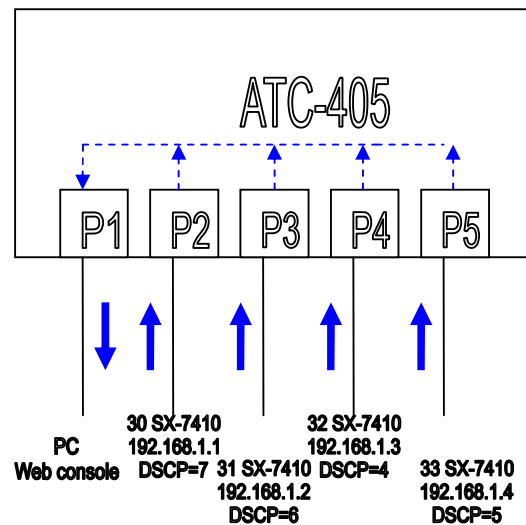
Qos TOS/DSCP Priority

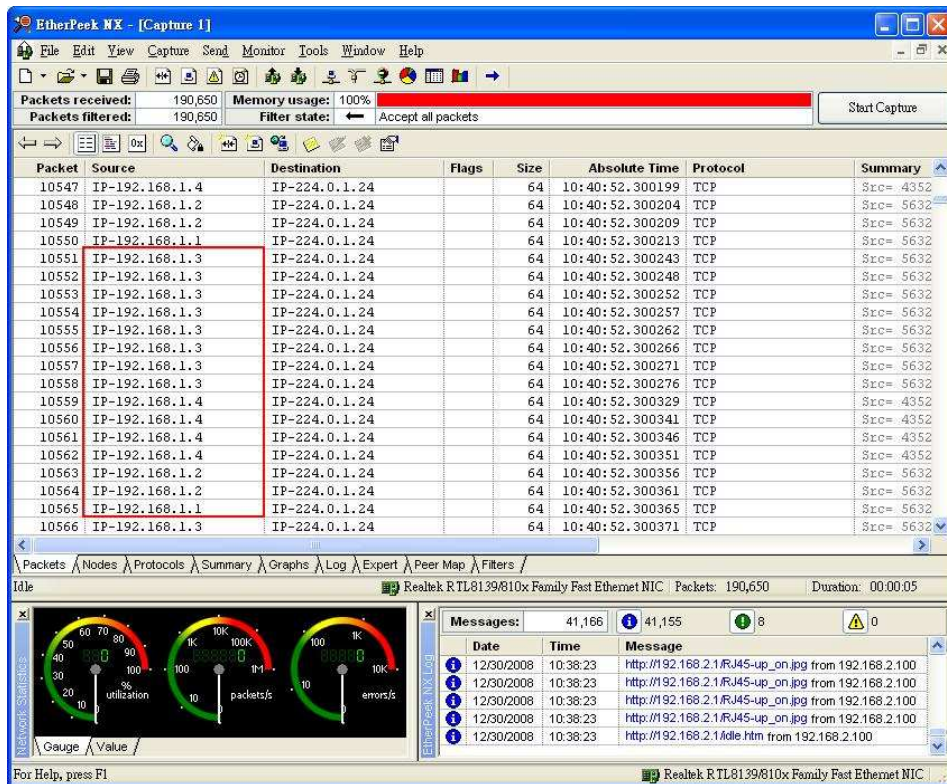
PS. The functions will work only if the selection of "TOS/DSCP priority" in the webpage - Priority Classification is selected.

TOS/DSCP No.	Queue No.
<input type="text"/>	<input type="text"/>
<input type="button" value="Submit"/>	

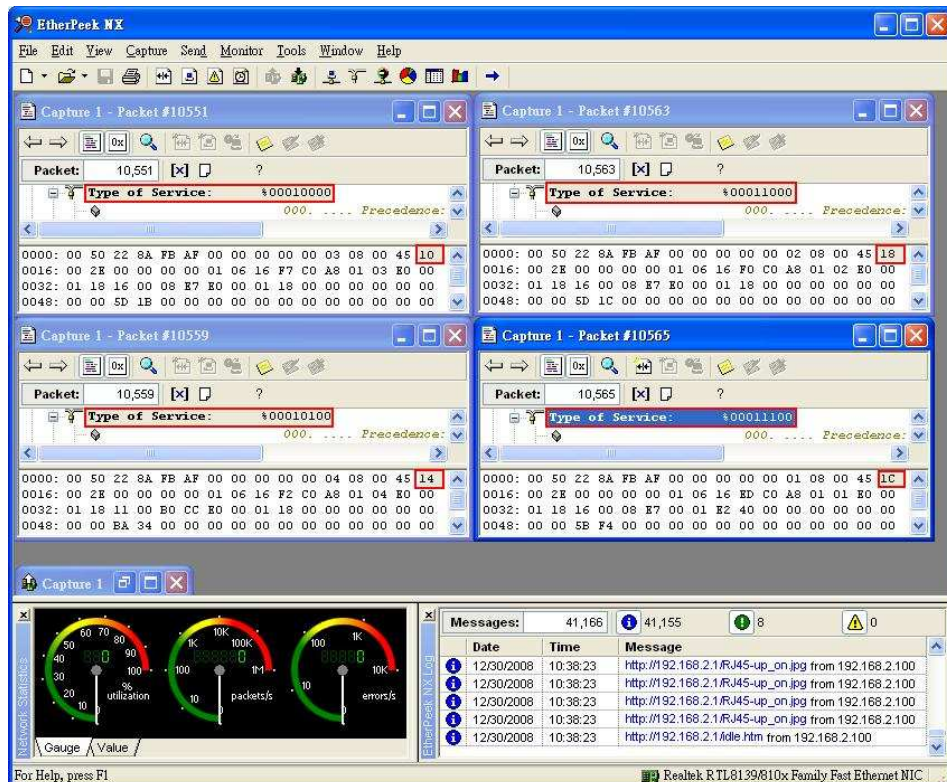
TOS/DSCP No.	Queue No.	TOS/DSCP No.	Queue No.	TOS/DSCP No.	Queue No.	TOS/DSCP No.	Queue No.
0	Queue0	16	Queue0	32	Queue0	48	Queue3
1	Queue0	17	Queue0	33	Queue0	49	Queue0
2	Queue0	18	Queue3	34	Queue3	50	Queue0
3	Queue0	19	Queue0	35	Queue0	51	Queue0
4	Queue3	20	Queue0	36	Queue0	52	Queue0
5	Queue2	21	Queue0	37	Queue0	53	Queue0
6	Queue1	22	Queue0	38	Queue0	54	Queue0
7	Queue0	23	Queue0	39	Queue0	55	Queue0
8	Queue0	24	Queue0	40	Queue0	56	Queue3
9	Queue0	25	Queue0	41	Queue0	57	Queue0
10	Queue3	26	Queue3	42	Queue0	58	Queue0
11	Queue0	27	Queue0	43	Queue0	59	Queue0

Port 2-5 forward unicast packets with 64byte length to port 1.



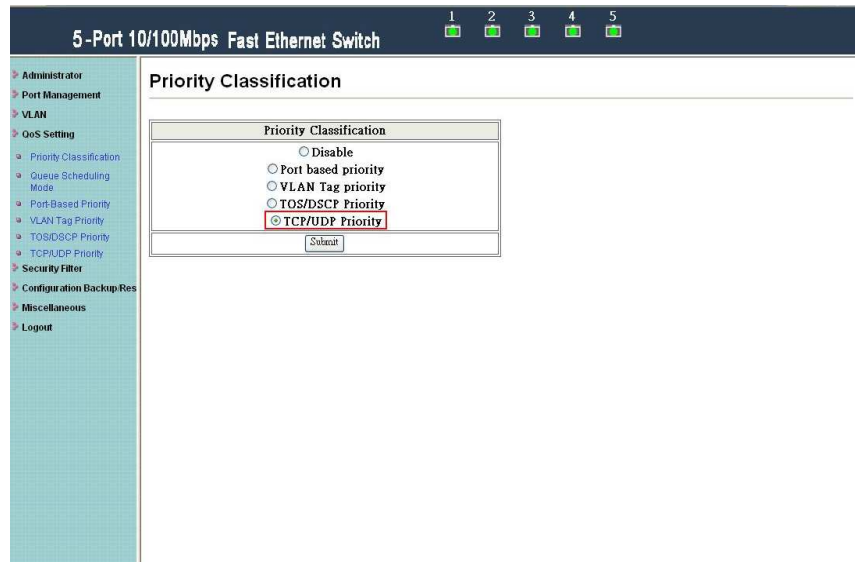


Etherpeek captures packets from port 2-5. The ratio of DSCP 4~7 is 8:4:2:1.



4.4 TCP/UDP priority

Select “TCP/UDP priority” and press “Submit” button.



5-Port 10/100Mbps Fast Ethernet Switch

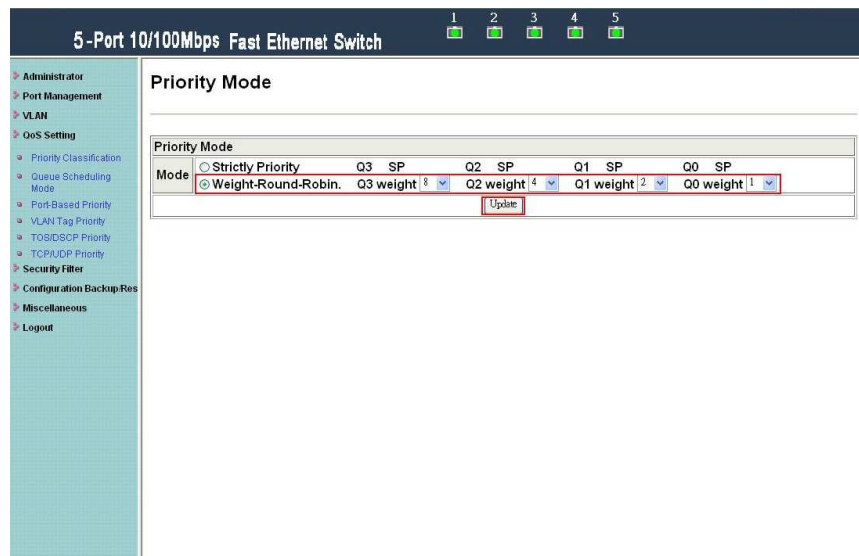
Priority Classification

Priority Classification

☐ Disable
☐ Port based priority
☐ VLAN Tag priority
☒ TOS/DSCP Priority
☒ TCP/UDP Priority

Submit

Select “weight-round-robin” and set Q3=8, Q2=4, Q1=2, Q0=1. Then press “Submit” button.



5-Port 10/100Mbps Fast Ethernet Switch

Priority Mode

Priority Mode

☐ Strictly Priority
☒ Weight-Round-Robin

Mode	Q3	SP	Q2	SP	Q1	SP	Q0	SP
Weight-Round-Robin	Q3 weight 8		Q2 weight 4		Q1 weight 2		Q0 weight 1	

Update

Set pre-defined logical port 0 → queue0, pre-defined logical port 1 → queue1, pre-defined logical port 2 → queue2 and pre-defined logical port 3 → queue3.

5-Port 10/100Mbps Fast Ethernet Switch 1 2 3 4 5

Qos TCP/UDP Priority

PS. The functions will work only if the selection of "TCP/UDP priority" in the webpage - Priority Classification is selected.

Logical Port Type

☐ Disable
☐ Source Logical Port
☐ Destination Logical Port
☒ Source or Destination Logical Port

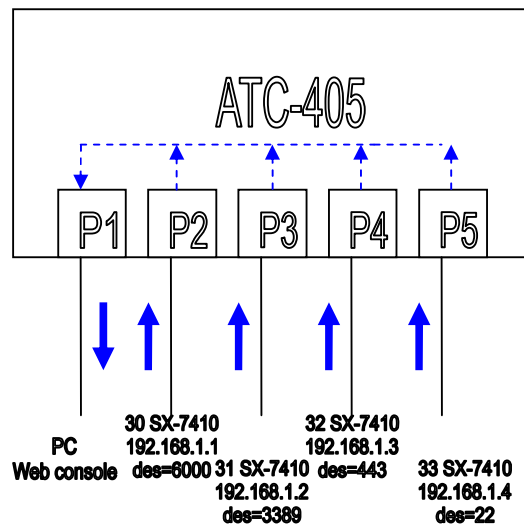
Pre-defined Logical Port Number

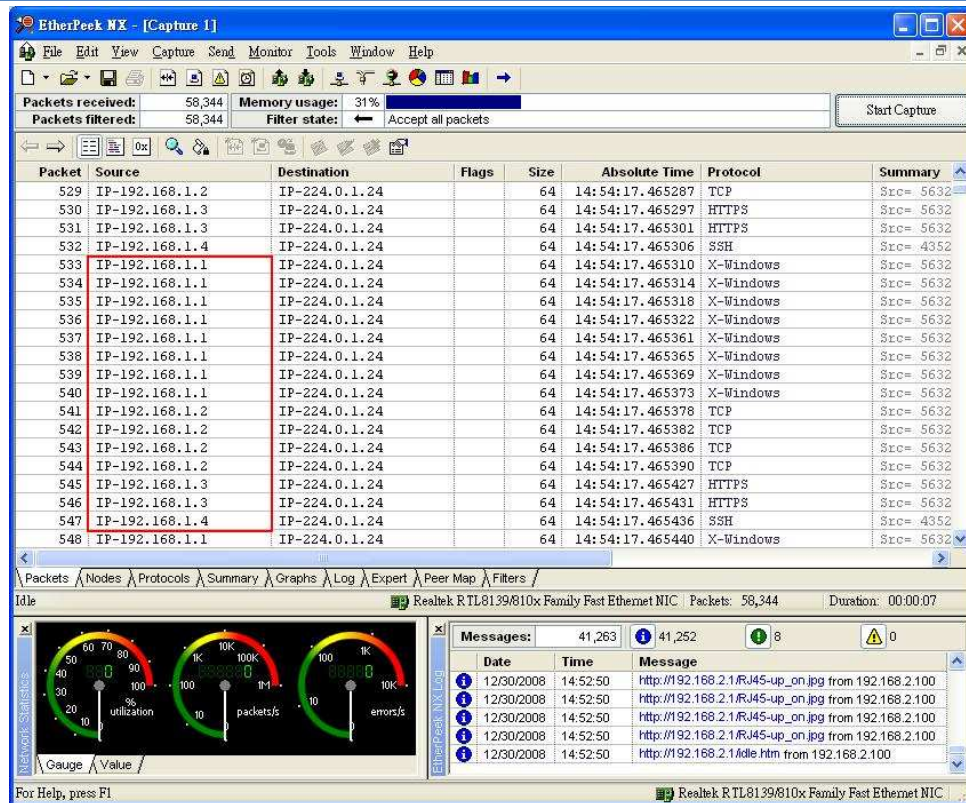
Entry	Enable	Logical Port Number(Hex)	Queue No.
0	Enable	0016	Queue0
1	Enable	01bb	Queue1
2	Enable	0d3d	Queue2
3	Enable	1770	Queue3

User-defined Logical Port Range

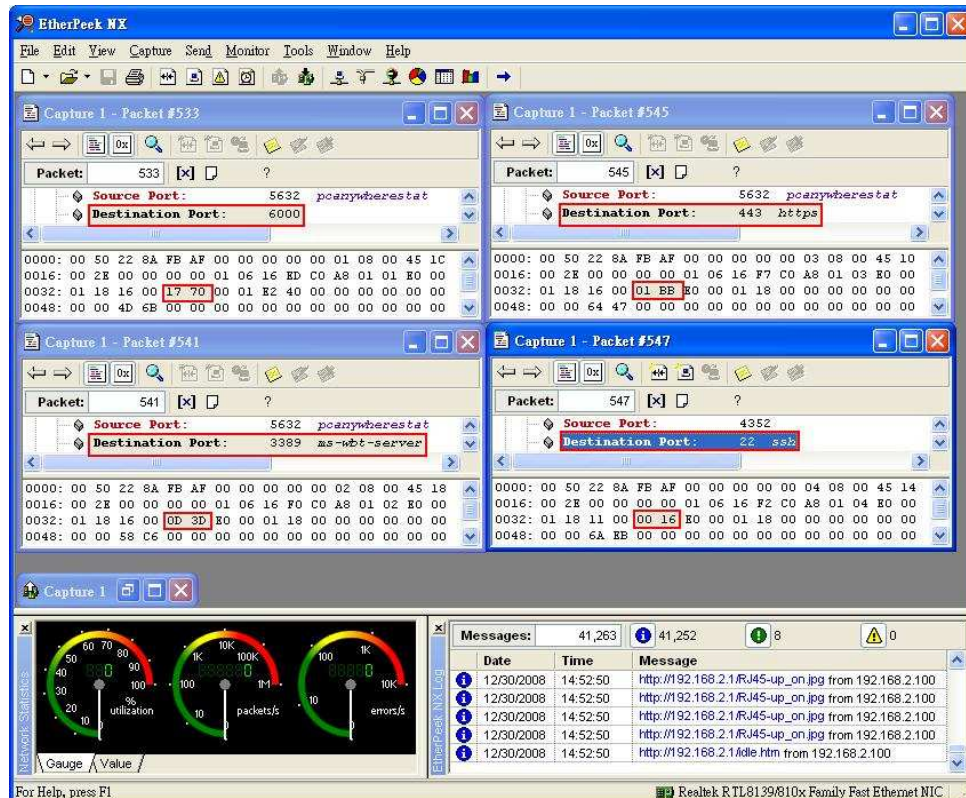
Entry	Enable	Low_Number(Hex)	High_number(Hex)	Queue No.
0	Enable	0017	0017	Queue2
1	Enable	16a8	16a8	Queue2

Port 2-5 forward unicast packets with 64byte length to port 1.





Etherpeek captures packets of port 2-5. The ratio of pre-defined logical port0-3 is 1:2:4:8.



Press “Update” button to take effect.

5-Port 10/100Mbps Fast Ethernet Switch

12345
■■■■■

Administrator
 Port Management
VLAN
 QoS Setting
 Security Filter
 Configuration Backup/Res
 Miscellaneous
 Logout

MAC ID Filter

0

:

:

:

:

:

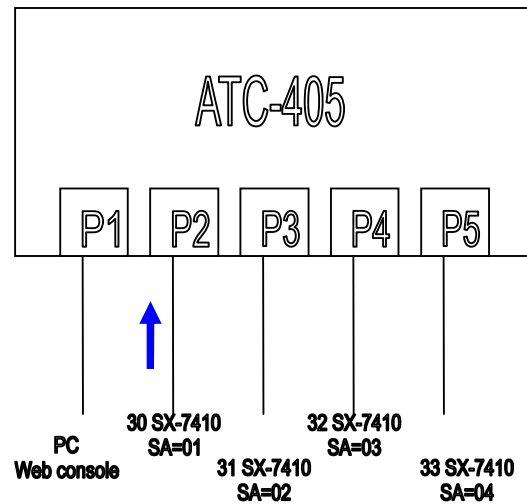
:

:

NO.	MAC Address	Enable
0	00:00:00:00:00:01	Enable
1	---	---
2	---	---
3	---	---
4	---	---

Note: The filter is only for unicast MAC Address. If the DA or SA is equal to the MAC Address, it will be dropped.

The SmartBits transmits packets with SMAC=00:00:00:00:00:01 to port 2.





5.2 Firewall

This page provides the user to filter specific traffic or forward packets by bandwidth control. If incoming packets match a predefined entry, the corresponding action is performed. It is possible to match multiple entries for an incoming packet and then the first matching entry is effective.

5-Port 10/100Mbps Fast Ethernet Switch

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

- Administrator
- Port Management
- VLAN
- QoS Setting
- **Security Filter**
 - MAC ID Filter
 - Firewall**
- Configuration Backup/Res
- Miscellaneous
- Logout

Firewall

Entry	Action	Bandwidth(0~3124)	Source IP	Destination IP	TCP/UDP	Source logical Port num
1		0 for 100Mbps				0~65535
<input type="button" value="Submit"/>						

Clear entry

Entry	Action	Bandwidth	IP Mode	Source/Start IP	Destination/End IP	TCP/UDP	TCP/UDP Mode	Source/Start logical Port num	Destination/End logical Port num
1		100Mbps							
2		100Mbps							
3		100Mbps							
4		100Mbps							
5		100Mbps							
6		100Mbps							
7		100Mbps							

Filter

Put a value of 1000 in the source logical port number of entry 1 and filter UDP packets. Then press the "Submit" button.

5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Firewall

Change to Range mode

Entry	Action	Bandwidth(0~3124)	Source IP	Destination IP	TCP/UDP	Source logical Port num
1	Filter	0 for 100Mbps	.	.	UDP	1000 0~65535

Submit

Clear entry Clear

Entry	Action	Bandwidth	IP Mode	Source/Start IP	Destination/End IP	TCP/UDP	TCP/UDP Mode	Source/Start logical Port num	Destination/End logical Port num
1		100Mbps							
2		100Mbps							
3		100Mbps							
4		100Mbps							
5		100Mbps							
6		100Mbps							
7		100Mbps							

After submitting, the status of entry 1 is updated.

5-Port 10/100Mbps Fast Ethernet Switch

1 2 3 4 5

Firewall

Change to Range mode

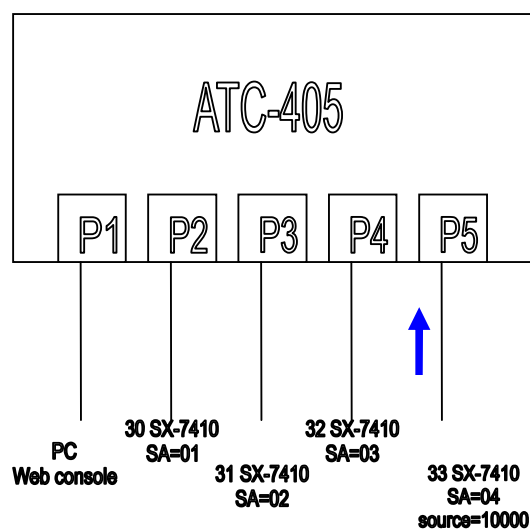
Entry	Action	Bandwidth(0~3124)	Source IP	Destination IP	TCP/UDP	Source logical Port num
1	Filter	0 for 100Mbps	.	.	UDP	1000 0~65535

Submit

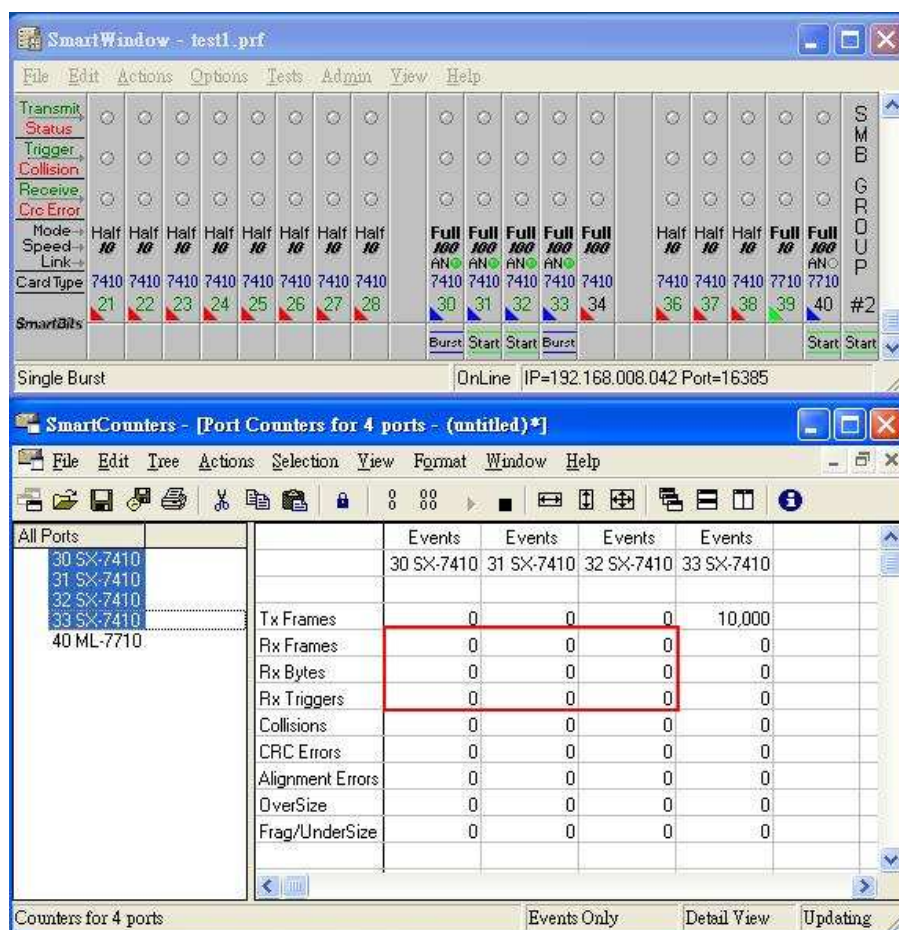
Clear entry Clear

Entry	Action	Bandwidth	IP Mode	Source/Start IP	Destination/End IP	TCP/UDP	TCP/UDP Mode	Source/Start logical Port num	Destination/End logical Port num
1	Filter	100Mbps				UDP	Fix	10000	
2		100Mbps							
3		100Mbps							
4		100Mbps							
5		100Mbps							
6		100Mbps							
7		100Mbps							

The SmartBits transmits packets with source logical port number 10000 to port 5.



Port 5 of GC-ATC-405 drops these packets.



SmartWindow - test1.prj

Transmit Status	Trigger	Collision	Receive	Crc Error	Mode	Speed	Link	Card Type	SmartBits
Half	Half	Half	Half	Half	Half	Half	Half	Half	Full
10	10	10	10	10	10	10	10	10	100
7410	7410	7410	7410	7410	7410	7410	7410	7410	7410
21	22	23	24	25	26	27	28	30	31

Single Burst OnLine IP=192.168.008.042 Port=16385

SmartCounters - [Port Counters for 4 ports - (untitled)*]

All Ports	Events	Events	Events	Events
	30 SX-7410	31 SX-7410	32 SX-7410	33 SX-7410
Tx Frames	0	0	0	10,000
Rx Frames	0	0	0	0
Rx Bytes	0	0	0	0
Rx Triggers	0	0	0	0
Collisions	0	0	0	0
CRC Errors	0	0	0	0
Alignment Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Counters for 4 ports Events Only Detail View Updating

Bandwidth

Put an IP of 192.168.10.10 in the destination IP of entry 2 with a bandwidth of 3.2Mbps. Then press the “Submit” button.

5-Port 10/100Mbps Fast Ethernet Switch

- Administrator
- Port Management
- VLAN
- QoS Setting
- Security Filter
 - MAC ID Filter
 - Firewall
 - Configuration Backup Res
 - Miscellaneous
 - Logout

Firewall

Entry	Action	Bandwidth(0~3124)	Source IP	Destination IP	TCP/UDP	Source logical Port num
2	Bandwidth	100 x32kbps		192.168.10.10		0~65535

Clear entry

Entry	Action	Bandwidth	IP Mode	Source/Start IP	Destination/End IP	TCP/UDP	TCP/UDP Mode	Source/Start logical Port num	Destination/End logical Port num
1	Filter	100Mbps	----	-----	-----	UDP	Fix	10000	-----
2		100Mbps	----	-----	-----	----	----	----	-----
3		100Mbps	----	-----	-----	----	----	----	-----
4		100Mbps	----	-----	-----	----	----	----	-----
5		100Mbps	----	-----	-----	----	----	----	-----
6		100Mbps	----	-----	-----	----	----	----	-----
7		100Mbps	----	-----	-----	----	----	----	-----

After submitting, the status of entry 2 is updated.

5-Port 10/100Mbps Fast Ethernet Switch

- Administrator
- Port Management
- VLAN
- QoS Setting
- Security Filter
 - MAC ID Filter
 - Firewall
 - Configuration Backup Res
 - Miscellaneous
 - Logout

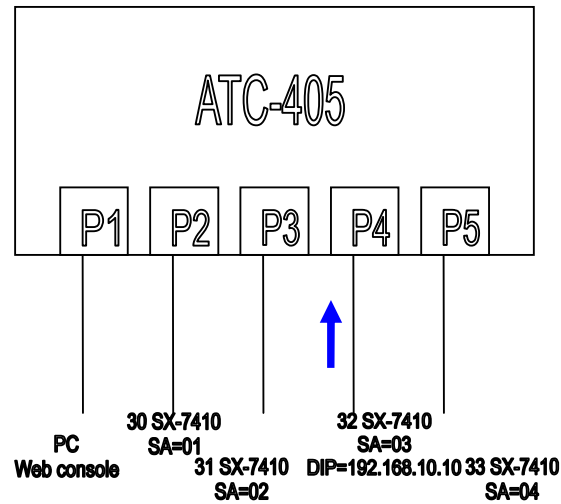
Firewall

Entry	Action	Bandwidth(0~3124)	Source IP	Destination IP	TCP/UDP	Source logical Port num
1		x32kbps				0~65535

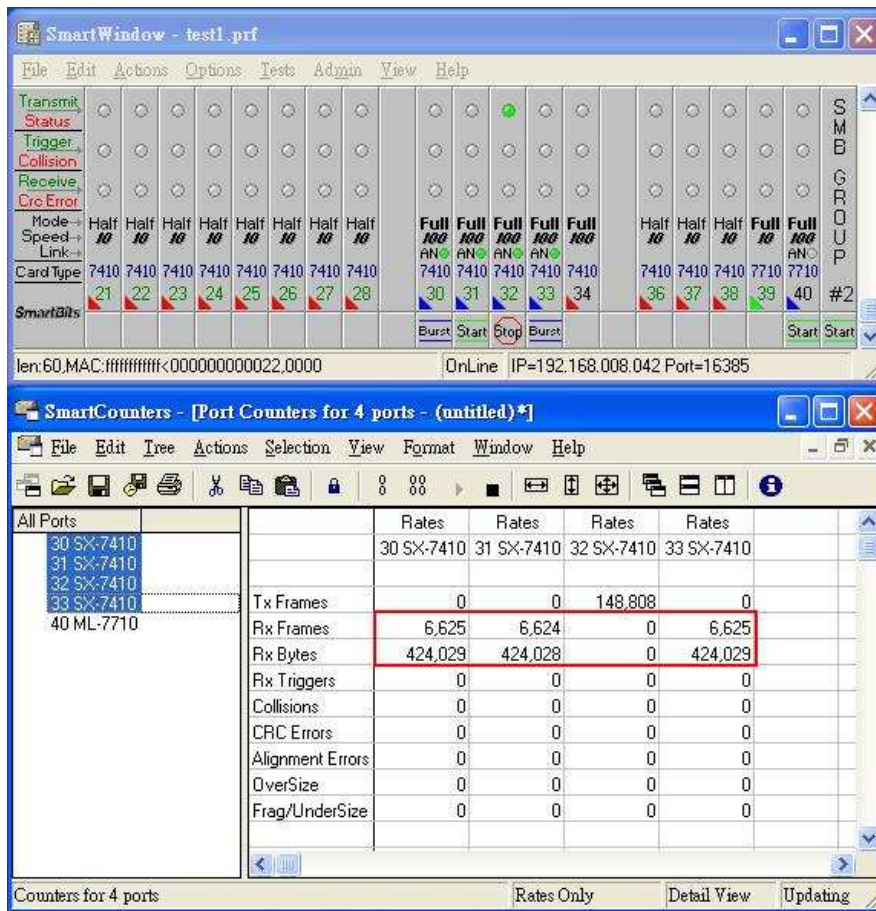
Clear entry

Entry	Action	Bandwidth	IP Mode	Source/Start IP	Destination/End IP	TCP/UDP	TCP/UDP Mode	Source/Start logical Port num	Destination/End logical Port num
1	Filter	100Mbps	----	-----	-----	UDP	Fix	10000	-----
2	Bandwidth	3.200Mbps	Fix	-----	192.168.10.10	----	----	----	-----
3		100Mbps	----	-----	-----	----	----	----	-----
4		100Mbps	----	-----	-----	----	----	----	-----
5		100Mbps	----	-----	-----	----	----	----	-----
6		100Mbps	----	-----	-----	----	----	----	-----
7		100Mbps	----	-----	-----	----	----	----	-----

The SmartBits transmits broadcast packets with destination IP=192.168.10.10 to port 4.



The RX bytes filed of 30~33-SX-7410 is about 424029 bytes. It is close to 3.2Mbps.



Clear Entry

Select entry 1 and click the “Clear” button.

5-Port 10/100Mbps Fast Ethernet Switch

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

- Administrator
- Port Management
- VLAN
- QoS Setting
- Security Filter
 - MAC ID Filter
 - Firewall
 - Configuration Backup/Res
- Miscellaneous
- Logout

Firewall

Change to Range mode

Entry	Action	Bandwidth(0~3124)	Source IP	Destination IP	TCP/UDP	Source logical Port num						
1		x32kbps		0~65535

Clear entry 1

Entry	Action	Bandwidth	IP Mode	Source/Start IP	Destination/End IP	TCP/UDP	TCP/UDP Mode	Source/Start logical Port num	Destination/End logical Port num
1	Filter	100Mbps	----	-----	-----	UDP	Fix	10000	-----
2	Bandwidth	3.200Mbps	Fix	-----	192.168.10.10	-----	-----	-----	-----
3		100Mbps	----	-----	-----	-----	-----	-----	-----
4		100Mbps	----	-----	-----	-----	-----	-----	-----
5		100Mbps	----	-----	-----	-----	-----	-----	-----
6		100Mbps	----	-----	-----	-----	-----	-----	-----
7		100Mbps	----	-----	-----	-----	-----	-----	-----

The status of entry 1 is cleared.

5-Port 10/100Mbps Fast Ethernet Switch

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

- Administrator
- Port Management
- VLAN
- QoS Setting
- Security Filter
 - MAC ID Filter
 - Firewall
 - Configuration Backup/Res
- Miscellaneous
- Logout

Firewall

Change to Range mode

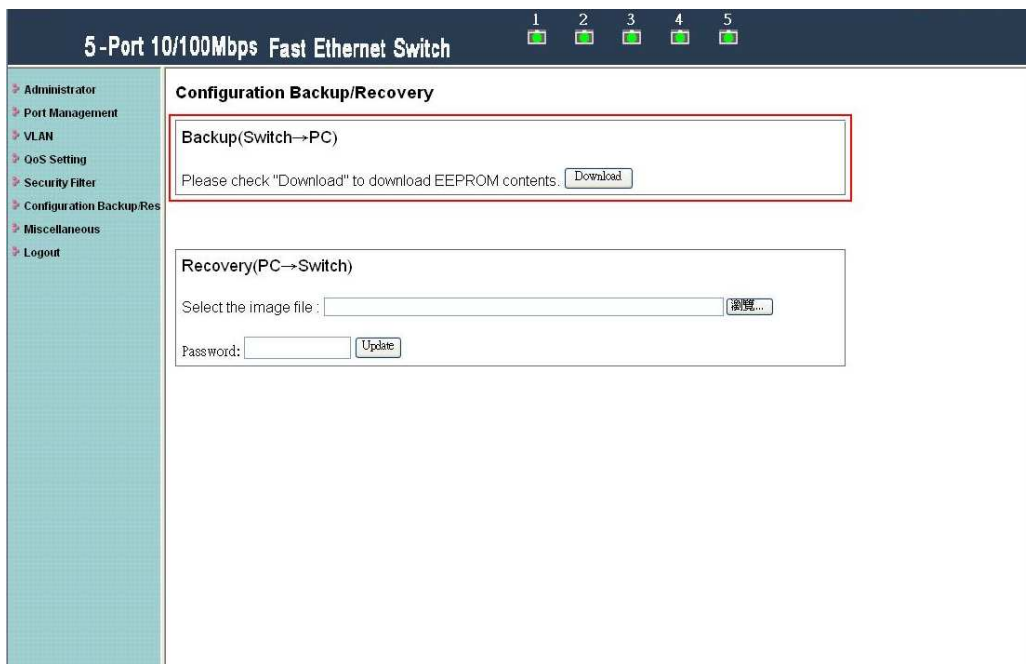
Entry	Action	Bandwidth(0~3124)	Source IP	Destination IP	TCP/UDP	Source logical Port num						
1		x32kbps		0~65535

Clear entry 1

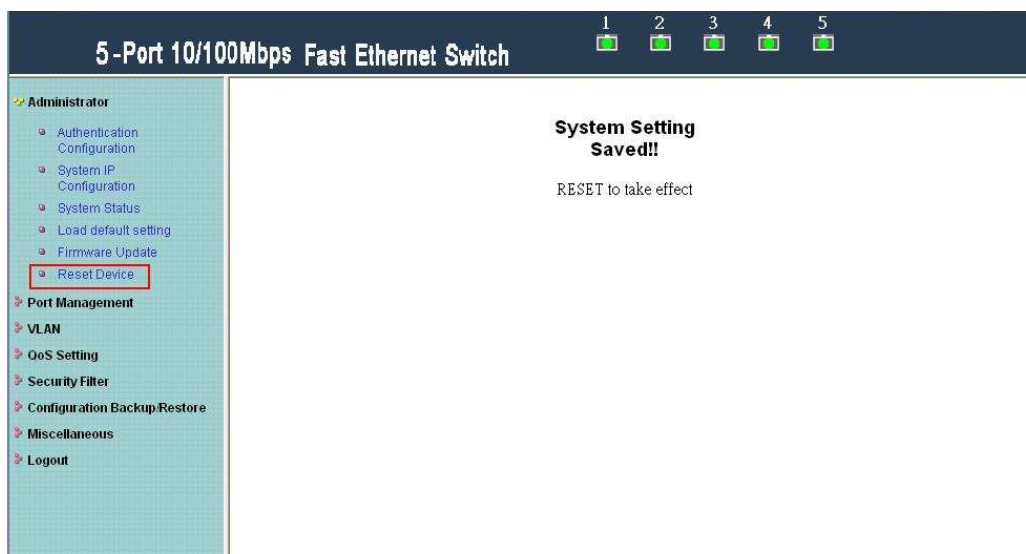
Entry	Action	Bandwidth	IP Mode	Source/Start IP	Destination/End IP	TCP/UDP	TCP/UDP Mode	Source/Start logical Port num	Destination/End logical Port num
1		100Mbps	----	-----	-----	-----	-----	-----	-----
2	Bandwidth	3.200Mbps	Fix	-----	192.168.10.10	-----	-----	-----	-----
3		100Mbps	----	-----	-----	-----	-----	-----	-----
4		100Mbps	----	-----	-----	-----	-----	-----	-----
5		100Mbps	----	-----	-----	-----	-----	-----	-----
6		100Mbps	----	-----	-----	-----	-----	-----	-----
7		100Mbps	----	-----	-----	-----	-----	-----	-----

6 Configuration Backup/Recovery

This function provides the user with a method to backup/recover the switch configuration. The user can save a configuration file to specified path. The default name of download file is down.bin. If the user wants to recover the original configuration, which is saved at the specified path, they need to enter the password and then press the “upload” button.



Press reset device when prompted.



7 Miscellaneous

CRC Counter

The page is used to count the CRC packets received from port 1-5. The maximum value of CRC counter is 255.

5-Port 10/100Mbps Fast Ethernet Switch

1
2
3
4
5

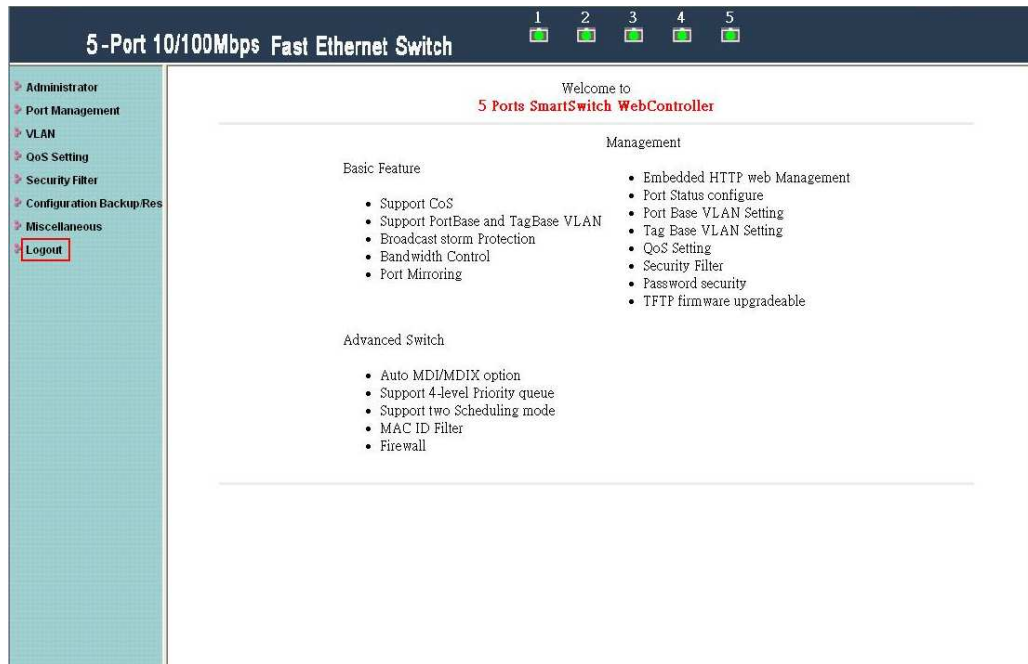
Administrator
Port Management
VLAN
QoS Setting
Security Filter
Configuration Backup/Res
Miscellaneous
CRC Counter
Logout

CRC Counter

Port 1~4	CRC Counter (Packet)
	0
<input type="button" value="Clear"/> <input type="button" value="Refresh"/>	
PS. The max value is 255.	

8 Logout

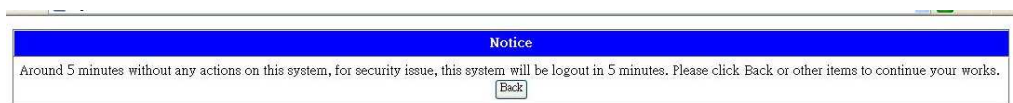
Log out to exit web management system.



Press "Yes" button to logout.



This warning will appear if idle time is more than five minutes. The system will logout automatically when idle time is more than ten minutes.



9 Trouble Shooting



1630 W. Diehl Rd
Naperville, Illinois 60563 USA

+1 630 245-1445

+1 630 245-1717 FAX

+1 800 975-4743 USA toll free

www.gridconnect.com