



24 Port Nway Fast Ethernet PoE Web Smart Switch



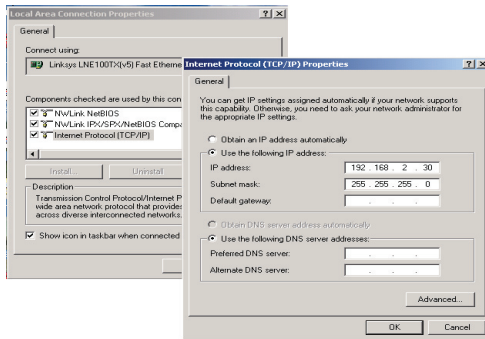
**User's Manual
DN-95314**

Web Smart Switch Configure

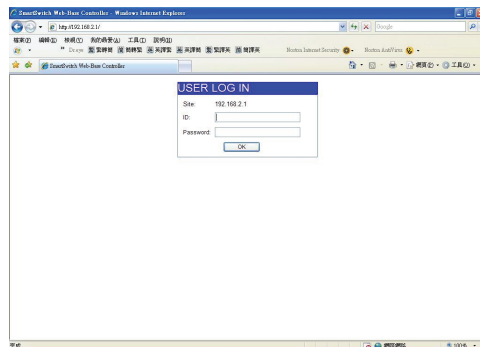
Please follow the steps to configure this Web Smart switch.

Step 1: Use a twisted pair cable to connect this switch to your PC.

Step 2: Set your PC's IP to 192.168.2.xx.



Step 3: Open the web browser (like IE...), and go to 192.168.2.1 Then you will see the login screen.



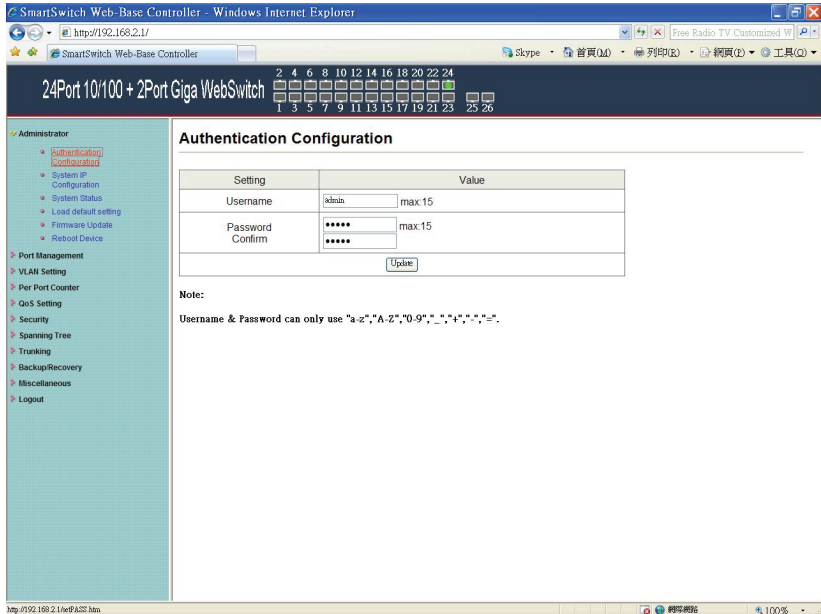
ID and the password: admin

Step 4: After the authentication procedure, the home page shows up. Select one of the configurations by clicking the icon.

- Administrator
- Port Management
- VLAN Setting
- Per Port Counter
- QoS Setting
- Security
- Spanning Tree
- Trunking
- Backup/Recovery
- Miscellaneous
- Logout



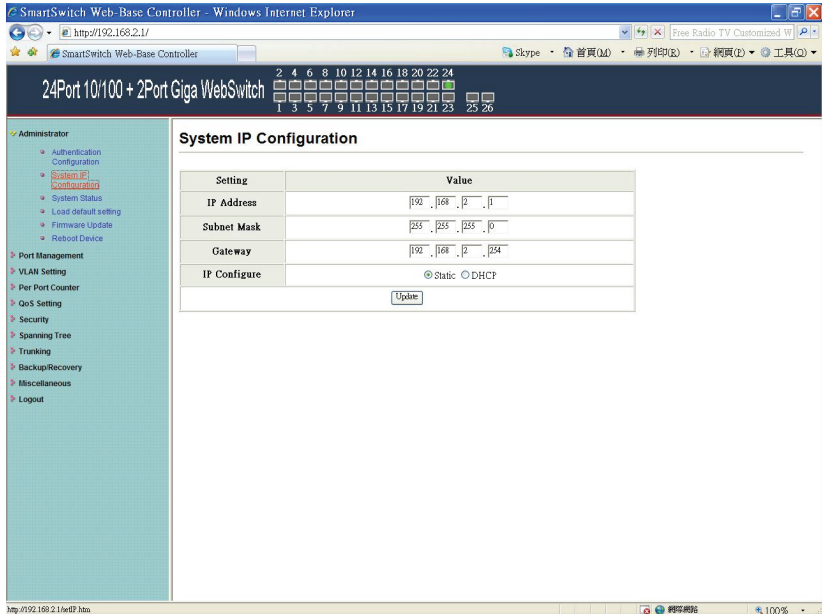
Administrator: Authentication Configuration



1. Change the user name and the password.
2. Click "Update" to confirm the new change.

Now, you can use the new user name and the password.

Administrator: System IP Configuration



1. Change the IP address: type the new IP address or select DHCP IP configuration.
2. Click “Update” to confirm the new change.
“Setting Process OK!!” will be shown on the screen.

Now, the setting of “System IP Configuration” is finished.

Administrator: System Status

The screenshot shows a web browser window titled "SmartSwitch Web-Base Controller - Windows Internet Explorer". The address bar shows "http://192.168.2.1/". The page header displays "24Port 10/100 + 2Port Giga WebSwitch" and a calendar for the month of February. The main content area is titled "System Status" and contains a table with the following information:

MAC Address	00:03:ce:01:17:d4
Number of Ports	24+2
Comment	<input type="text" value="switch"/> MAX:15
Contact	<input type="text"/> MAX:15
Location	<input type="text"/> MAX:15
System Version	V100211

Below the table is a note: "Note: Comment name only can use 'a-z','A-Z','_','-',' ','.'','0-9'". An "Update" button is located at the bottom right of the table.

The left sidebar contains a navigation menu with the following items:

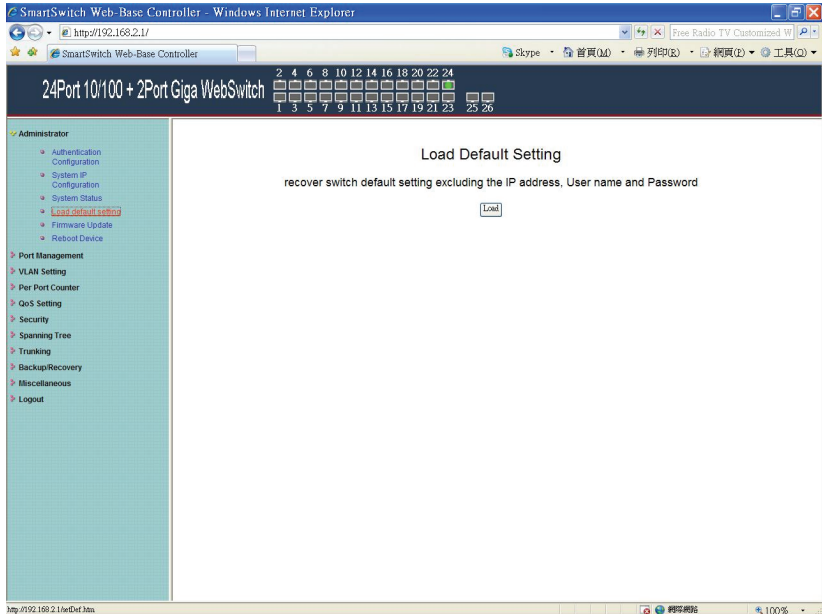
- Administrator
 - Authentication Configuration
 - System IP Configuration
 - System Status
 - Load default setting
 - Firmware Update
 - Reboot Device
- Port Management
- VLAN Setting
- Per Port Counter
- QoS Setting
- Security
- Spanning Tree
- Trunking
- Backup/Recovery
- Miscellaneous
- Logout

MAC address and system version will be shown on the screen.

1. Change the new comment of this switch by typing the new comment.
2. Click “Update” to confirm the new change.

Now, the setting of “System Status” is finished.

Administrator: Load Default Setting

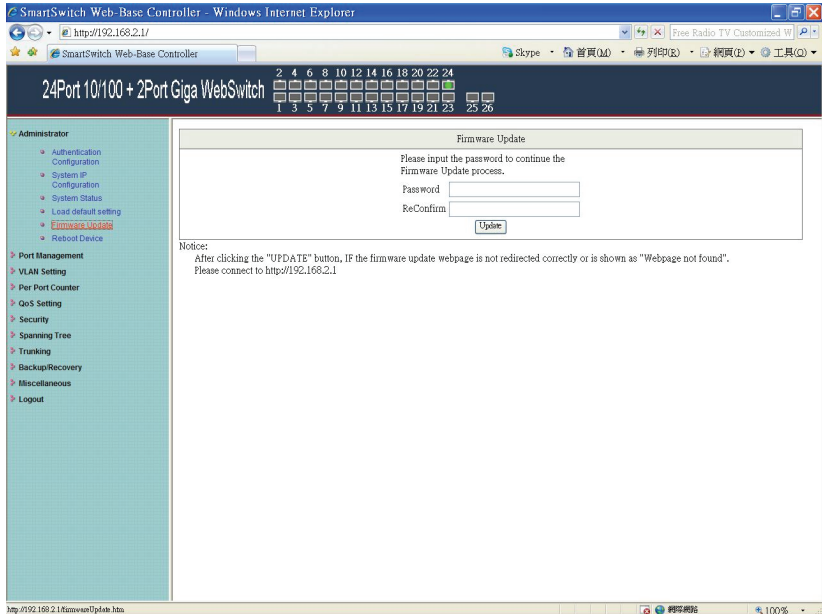


1. Click “Load” to back to the factory default setting.

****Note:** Recover switch default setting excluding the IP address, User name and Password.

Now, the default is loaded.

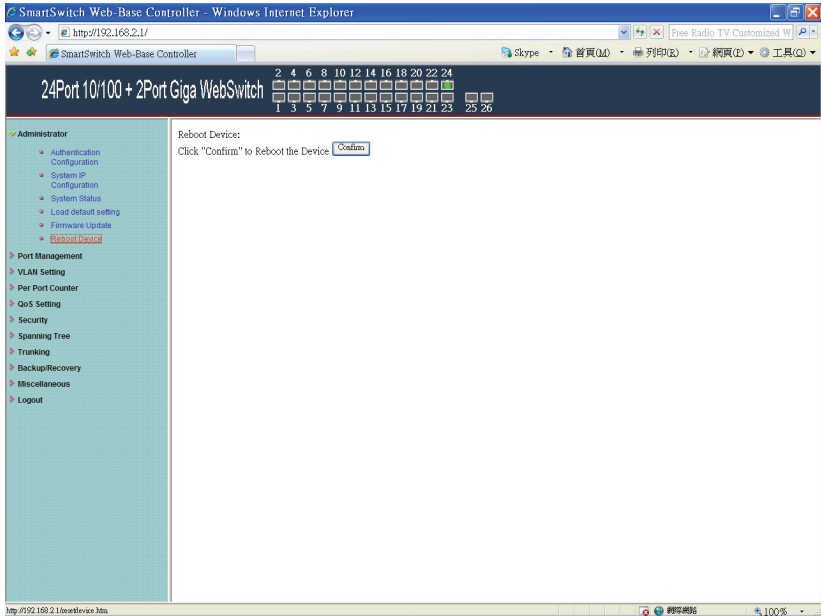
Administrator: Firmware Update



Follow the instruction on the screen to update the new firmware.

Please contact with your sales agents to get the latest firmware information.

Administrator: Reboot Device



1. Click “Confirm” to reboot the device.

Now, the setting of “Reboot Device” is finished.

Port Management: Port Configuration

The screenshot shows the 'Port Configuration' page in the SmartSwitch Web-Base Controller. The page title is '24Port 10/100 + 2Port Giga WebSwitch'. The left sidebar contains navigation options like Administrator, Port Management, VLAN Setting, etc. The main content area shows a 'Port Configuration' section with a table of port settings.

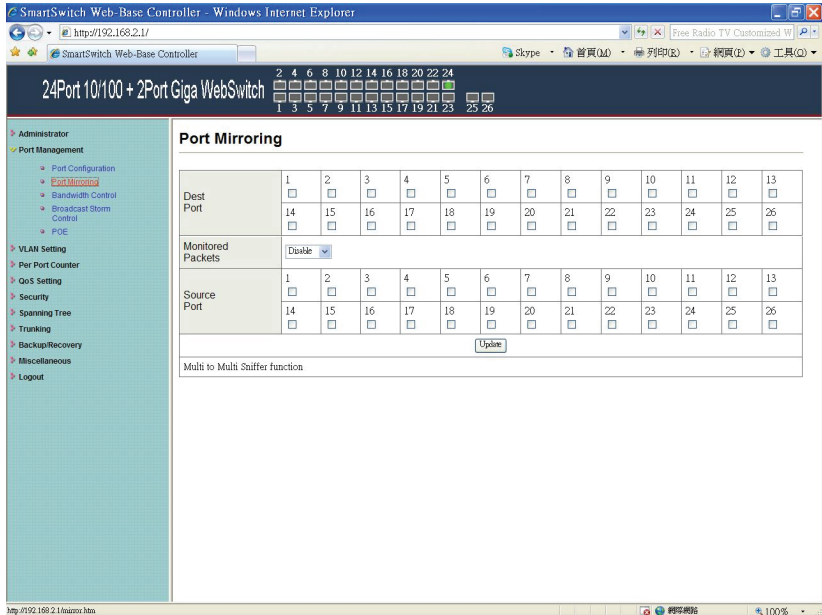
Function	Tx/Ex Ability	Auto-Negotiation	Speed	Duplex	Pause	Backpressure	Add. Learning				
Select Port No.	01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input type="checkbox"/> 05 <input type="checkbox"/> 06 <input type="checkbox"/> 07 <input type="checkbox"/> 08 <input type="checkbox"/> 09 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/>										
<input type="button" value="Update"/>											
Port	Current Status				Setting Status						
	Link	Speed	Duplex	FlowCtrl	Tx/Ex Ability	Auto-Nego	Speed	Duplex	Pause	Backpressure	Add. Learning
1	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
2	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
3	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
4	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
5	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
6	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
7	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
8	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
9	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
10	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
11	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
12	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
13	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
14	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
15	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
16	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
17	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
18	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
19	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
20	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
21	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
22	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
23	---	---	---	---	ON	AUTO	100M	FULL	ON	ON	OFF
24	●	100M	FULL	ON	ON	AUTO	100M	FULL	ON	ON	ON
25	---	---	---	---	ON	AUTO	1000M	FULL	ON	ON	OFF
26	---	---	---	---	ON	AUTO	1000M	FULL	ON	ON	OFF

Select the "Port No." - configure the mode below:

1. "Auto" - enable/disable Auto-Negotiation.
2. "Speed" - 10M or 100M mode for the selected port.
3. "Duplex" - Full or Half-Duplex mode for the selected port.
4. "Pause" - enable/disable for the selected port.
5. "Backpressure" - enable/disable for the selected port.
6. "Tx Capability" - enable/disable for the selected port.

7. “Addr. Learning” - enable/disable for the selected port.

Port Management: Port Mirroring



The screenshot shows the SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The page title is "24Port 10/100 + 2Port Giga WebSwitch". The left sidebar contains a navigation menu with the following items: Administrator, Port Management (selected), VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout. The "Port Management" section is expanded to show "Port Mirroring".

The main content area is titled "Port Mirroring" and contains the following configuration options:

- Dest Port:** A grid of 26 checkboxes for ports 1 through 26. Ports 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26 are all unchecked.
- Monitored Packets:** A dropdown menu set to "Disable".
- Source Port:** A grid of 26 checkboxes for ports 1 through 26. Ports 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26 are all unchecked.
- Update:** A button to save the configuration.
- Multi to Multi Staifer function:** A checkbox that is unchecked.

Port Mirroring is used to mirror traffic, RX, TX or TX&RX, from Source port to Destination port for analysis.

1. Select the Destination port: you can choose port 1 to port 26
2. Select the Source port: by clicking the checking box of the port.
3. Click “Update” to save the setting.

Now, the setting of “Port Mirroring” is finished.

Port Management: Bandwidth Control

The screenshot displays the 'Bandwidth Control' configuration page in a web browser. The interface includes a navigation sidebar on the left with options like Administrator, Port Management, VLAN Setting, and Security. The main content area is titled 'Bandwidth Control' and features a configuration form with the following fields:

- Port No.:** A dropdown menu currently showing '0'.
- Tx Rate:** A field with a dropdown set to 'Low' and a value field containing '(0-255) (0 Full Speed)'.
- Rx Rate:** A field with a dropdown set to 'Low' and a value field containing '(0-255) (0 Full Speed)'.

Below the form, there is a 'Speed Base' section with two options: 'Low' and 'High'. The 'Low' option is selected. The text explains that for 'Low', the actual Tx/Rx bandwidth is calculated as Rate value x 32 Kbps, and for 'High', it is Rate value x 256 Kbps. A table below the form shows the status of 26 ports, with columns for Port No., Tx Rate, Rx Rate, and Link Speed.

Port No.	Tx Rate	Rx Rate	Link Speed	Port No.	Tx Rate	Rx Rate	Link Speed
1	Full Speed	Full Speed	---	14	Full Speed	Full Speed	---
2	Full Speed	Full Speed	---	15	Full Speed	Full Speed	---
3	Full Speed	Full Speed	---	16	Full Speed	Full Speed	---
4	Full Speed	Full Speed	---	17	Full Speed	Full Speed	---
5	Full Speed	Full Speed	---	18	Full Speed	Full Speed	---
6	Full Speed	Full Speed	---	19	Full Speed	Full Speed	---
7	Full Speed	Full Speed	---	20	Full Speed	Full Speed	---
8	Full Speed	Full Speed	---	21	Full Speed	Full Speed	---
9	Full Speed	Full Speed	---	22	Full Speed	Full Speed	---
10	Full Speed	Full Speed	---	23	Full Speed	Full Speed	---
11	Full Speed	Full Speed	---	24	Full Speed	Full Speed	100M
12	Full Speed	Full Speed	---	25	Full Speed	Full Speed	---
13	Full Speed	Full Speed	---	26	Full Speed	Full Speed	---

1. Select the "Port No.": you can choose port 1 to port 26
2. "TX Rate Value": set the transmission rate of the selected port. (0:Full speed; 1~255:Specified bandwidth.)
3. "RX Rate Value": set the receiving rate of the selected port. (0: Full speed; 1~255: Specified bandwidth.)
4. "Resolution" : Low: 32 kbps / High: 512 kbps

5. Click “Update” to confirm the setting or “LoadDefault”.
Now, the setting of “Bandwidth Control” is finished.

Port Management: Broadcast Storm Control

Broadcast Storm Control

Threshold	<input type="text" value="63"/>													
	1-63													
Enable Port	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This value indicates the number of broadcast packet which is allowed to enter each port in one time unit. One time unit is 50us for Gigabit speed, 500 us for 100Mbps speed and 5000us for 10Mbps speed

1. “Threshold” - Set the threshold from 1~63.
2. “Enable Port” - per port to define the status of broadcast packets.
3. Click “Update” to confirm the setting.

Now, the setting of “Broadcast Storm Control” is finished.

Port Management: PoE Configuration

SmartSwitch Web-Base Controller - Windows Internet Explorer

SmartSwitch Web-Base Controller

24Port 10/100 + 2Port Giga WebSwitch

PoE Configuration

Port	1	2	3	4	5	6	7	8
Enable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PSE Current	No Load	No Load	No Load	No Load	No Load	No Load	No Load	No Load
Minimum Output Power	---	---	---	---	---	---	---	---
POE Class	---	---	---	---	---	---	---	---
Port	09	10	11	12	13	14	15	16
Enable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PSE Current	No Load	No Load	No Load	No Load	No Load	No Load	No Load	No Load
Minimum Output Power	---	---	---	---	---	---	---	---
POE Class	---	---	---	---	---	---	---	---
Port	17	18	19	20	21	22	23	24
Enable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PSE Current	No Load	No Load	No Load	No Load	No Load	No Load	No Load	No Load
Minimum Output Power	---	---	---	---	---	---	---	---
POE Class	---	---	---	---	---	---	---	---

Update: Update the power control function.
 Enable : Power On
 Enable : Power Off

Update

Remote access and monitor the attached PD (Powered Device) status by using Enable/Disable function.

****Total Power of 24-port PSE/PoE: 184.8W**

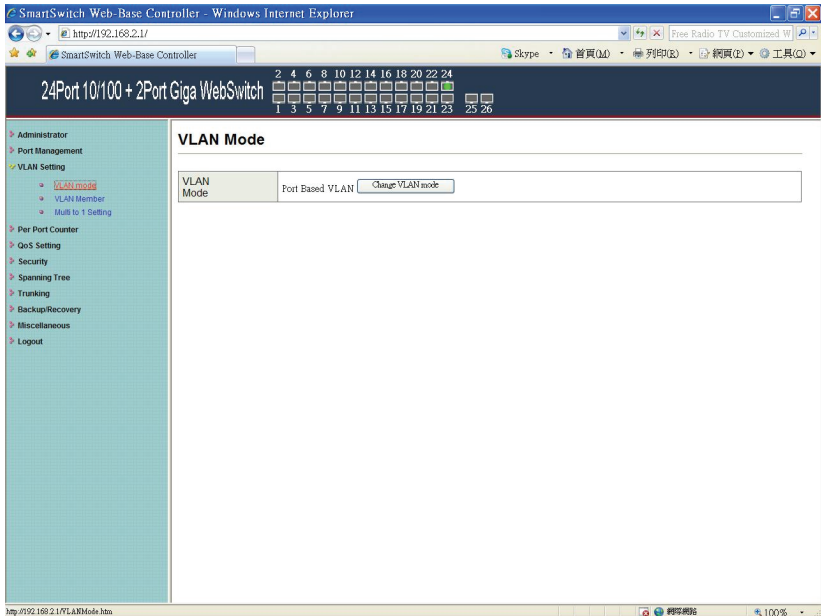
1. **Enable:** POE of the port is able to supply power to the attached PD (Powered Device)
2. **PSE Current & Minimum Output Power:** The status of the port current and minimum output power.
3. **POE class:** each POE port will detect the class of the

attached PD (Powered Device)

4. Click “Update” to confirm and finish the setting.

Now, the setting of “PoE Configuration” is finished.

VLAN Setting: VLAN Mode



There are two VLAN modes : Port Based VLAN and Tagged VLAN.

Click “Change VLAN mode” to select the mode.

****If the Port Based VLAN function is enabled, Multi to 1 setting and tag Based VLAN will be disabled automatically.**

Now, the setting of “VLAN Mode” is finished.

VLAN Setting: VLAN Member Setting (Port Based)

The screenshot shows the 'VLAN Member Setting (Port Based)' configuration page in the SmartSwitch Web-Base Controller. The page is titled '24Port 10/100 + 2Port Giga WebSwitch'. The left sidebar contains a navigation menu with options like Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout. The main content area is divided into two sections: 'VLAN Member Setting (Port Based)' and 'VLAN MEMBER'.

VLAN Member Setting (Port Based)

Port	01 [Hex]												
Dest PORT	01	02	03	04	05	06	07	08	09	10	11	12	13
select	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dest PORT	14	15	16	17	18	19	20	21	22	23	24	25	26
select	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Buttons: Update | LoadDefault

VLAN MEMBER

Port	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
2	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
3	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
4	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
5	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
6	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
7	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
8	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
9	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
10	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
11	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
12	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
13	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
14	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
15	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
16	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
17	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
18	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
19	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
20	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
21	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
22	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
26	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Port	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
									1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
								0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	

Buttons: Update | LoadDefault

You can select a port group.

1. Click the port numbers: which you want to put them into the selected VLAN group.

2. Click “Update” to confirm and finish the setting.
3. Click “LoadDefault” to back to the original factory setting.

Now, the setting of “VLAN Mode” is finished.

VLAN Setting: Multi to 1 Setting

The screenshot shows the 'Multi to 1 Setting' configuration page in a web browser. The page title is '24Port 10/100 + 2Port Giga WebSwitch'. The left sidebar shows the navigation menu with 'VLAN Setting' expanded to 'Multi to 1 Setting'. The main content area has a 'Destination PortNo.' dropdown set to '01'. Below it is a table for 'Current Setting' with checkboxes for ports 01 through 24. A note states: 'Note: "Disabled port" defines the switch physical port which is disabled.' Below the note is a diagram showing a central 'Destination Port/Current Setting' (port 22) with arrows pointing to 'Ports' 01, 02, and 24, which are mapped to 'VLAN Groups' 1, 2, and 24 respectively. Three numbered footnotes are provided at the bottom of the diagram area.

Destination PortNo.	01											
Current Setting	Port-											
Disable Port	01	02	03	04	05	06	07	08	09	10	11	12
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	13	14	15	16	17	18	19	20	21	22	23	24
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: "Disabled port" defines the switch physical port which is disabled.

1. An example for Multi-to-1 structure

Ports **VLAN Groups**

01 1

02 2

⋮ ⋮

⋮ ⋮

24 24

2. The original setting of the VLAN Group will be cleared and replaced by this special structure if you enable this function.
 On the other hand, if you set the VLAN Group again, this special structure will be cleared and replaced by your newest setting.
 3. This configuration is port base VLAN only.

This is a special design for easily setting the switch VLAN into “VLAN Per Port”.

1. Choose “Destination Port No”.
2. Choose “Disable Port”
3. “Disable Port” – choose the port which you don’t want to use
4. Click “Update” to confirm and finish the setting.

After this setting, all ports can only connect to destination ports.

Per Port Counter: Counter Category

The screenshot shows the SmartSwitch Web-Base Controller interface. The browser address bar indicates the URL is http://192.168.2.1/. The page title is "24Port 10/100 + 2Port Giga WebSwitch". The left sidebar contains a navigation menu with the following items: Administrator, Port Management, VLAN Setting, Per Port Counter (selected), Port Counter (sub-selected), QoS Setting, Security, Spanning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout.

The main content area is titled "Counter Category". It features a "Counter Mode Selection:" dropdown menu set to "Transmit Packet & Receive Packet". Below this is a table with the following data:

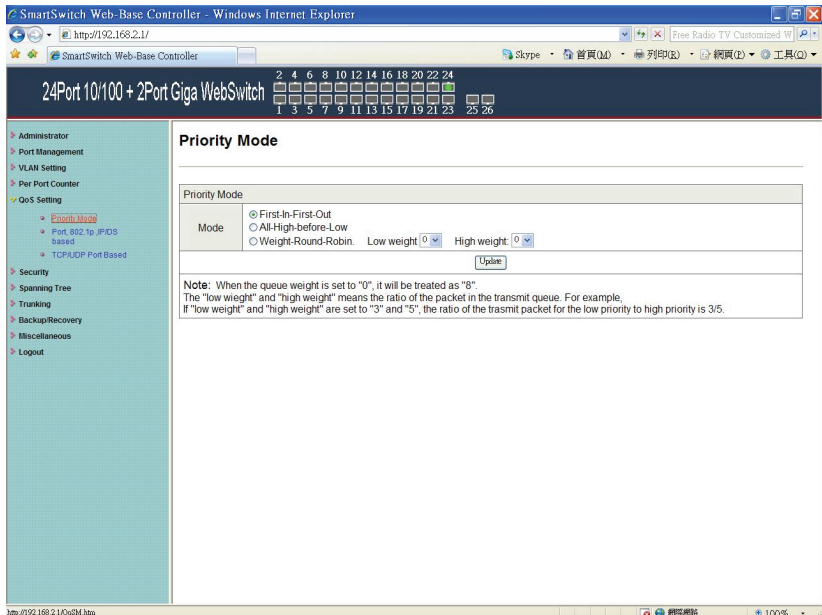
Port	Transmit Packet Receive Packet	
01	0	0
02	0	0
03	0	0
04	0	0
05	0	0
06	0	0
07	0	0
08	0	0
09	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	900	777
25	0	0
26	0	0

At the bottom of the table, there is a "Refresh" button.

You can read the transmitting and receiving packet of the connecting port.

Click “Refresh” or “Clear” the data.

QoS Setting: Priority Mode



There are three Priority Modes to select.

1. “First-in-First-Out” - the first receiving packet will be firstly transmitted.
2. “All-High-before-Low” – All packets will be assigned to either
Q2(high) priority queue or Q1(low)

priority queue.

3. "Weight-Round-Robin" - set the ratio of the transmitting packet
for the low priority to high priority.
4. Click "Update" to confirm and finish the setting.

QoS Setting: Class of Service Configuration

The screenshot shows the 'Class of Service Configuration' page in the SmartSwitch Web-Base Controller. The page title is '24Port 10/100 + 2Port Giga WebSwitch'. The left sidebar contains navigation options: Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting (selected), Security, Spanning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout. Under 'QoS Setting', 'TCP/UDP Port based' is selected.

The main content area is titled 'Class of Service Configuration' and contains a table with the following columns: Protocol and Option. The table lists various protocols and their corresponding options, all set to 'FIFO' except for 'BOOTP_DHCP(67,68)' which is set to 'Low'.

Protocol	Option
FTP(20,21)	FIFO
SSH(22)	FIFO
TELNET(23)	FIFO
SMTP(25)	FIFO
DNS(53)	FIFO
TFTP(69)	FIFO
HTTP(80,8080)	FIFO
POP3(110)	FIFO
NEWS(119)	FIFO
SNTP(123)	FIFO
NetBIOS(137-139)	FIFO
IMAP(143,220)	FIFO
SNMP(161,162)	FIFO
HTTPS(443)	FIFO
MSN(1863)	FIFO
XRD_RDP(3389)	FIFO
QQ(4000,8000)	FIFO
ICQ(5190)	FIFO
Yahoo(5050)	FIFO
BOOTP_DHCP(67,68)	Low
User_Define_a	FIFO
User_Define_b	FIFO
User_Define_c	FIFO
User_Define_d	FIFO

Below the table, there are input fields for 'User_Define' parameters:

User_Define	User_Define_a	User_Define_b	User_Define_c	User_Define_d
Port number (1-65535)	Port: <input type="text"/>	Port: <input type="text"/>	Port: <input type="text"/>	Port: <input type="text"/>
Mask(0-255)	Mask: <input type="text"/>	Mask: <input type="text"/>	Mask: <input type="text"/>	Mask: <input type="text"/>

Notes and options:

- Note:** The mask defines which bit is ignored within the IP address bit 0 - bit 7. For example, UDP/TCP port = 65535 and mask = 5, this means 65530, 65531, 65534 and 65535 are all taken into account. UDP/TCP port = 65535 and mask=0, this means only 65535 is taken into account.
- TCPI/UDP port QoS function:** Not Override
- Note:** When the "override" item is selected, the Port_based, Tag_based, IP TOS_based, CoS listed above will be ignored.

An 'Update' button is located below the notes.

Additional text at the bottom of the page:

- The Class of Service for TCP/UDP port number allows the network administrator to assign the specific application to a priority queue.
- F-I-F-O:** The incoming packet will be forwarded in first-in-first-out scheme.
- Discard:** The incoming packet will be discarded at the source port.
- High:** The incoming packet will be forwarded with the high priority.
- Low:** The incoming packet will be forwarded with the Low priority.

You can set QoS mode of per port by different bases.
 TCP/UDP > TP TPS/DS > 802.1P > Physical port

1. "TCP/UDP Port" – effective for the selected physical port only.

"Drop" option is the global setting for all physical

ports.

The packet queue will be transferred based on the number of "Weight-Round-Robin" on **QoS Setting: Priority Mode**.

** Weight-Round-Robin – Q1~Q8

***"Drop" - packets will be dropped.

2. "Priority Setting" - It means the packets with special IP will be
firstly transmitted.
3. "802.1p" – Priority mapping table as the screen shown.
4. "Physical port" - you can select the port which you want to configure as Q1~Q8 priority.
5. Click "Update" to confirm and finish the setting.

Now, the setting of "Class of Service" is finished.

Security: MAC Address Filter

Port No.	Binding Status	Port No.	Binding Status
1	Enable	14	Enable
2	Enable	15	Enable
3	Enable	16	Enable
4	Enable	17	Enable
5	Enable	18	Enable
6	Enable	19	Enable
7	Enable	20	Enable
8	Enable	21	Enable
9	Enable	22	Enable
10	Enable	23	Enable
11	Enable	24	Disable
12	Enable	25	Enable
13	Enable	26	Enable

Note: The MAC address of current management connection is 00:19:21:56:c0:094 at port 24.

Set special MAC address to activate on the selected port

1. Choose “Select Port” – port 1~26
2. “Binding” – “Enable”: allow the packet with the specified source MAC address to enter this port.
3. Click “Update” to confirm and finish the setting.

Now, the setting of “MAC Address Filter” is finished.

Security: TCP_UDP Filter Configuration

The screenshot shows the 'TCP_UDP Filter Configuration' page in a web browser. The page title is '24Port 10/100 + 2Port Giga WebSwitch'. The left sidebar contains a navigation menu with options like Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spinning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout. The main content area is titled 'TCP_UDP Filter Configuration' and includes the following sections:

- Function Enable:** A dropdown menu currently set to 'Disable'.
- Port Filtering Rule:** A dropdown menu set to 'negative'. Below it is a note: '(1)The outgoing packet with selected protocol will be either forwarded or dropped at secure WAN port as the figure shown below. (2)"negative" means the selected protocol will be dropped and other protocols will be forwarded. "positive" means the selected protocol will be forwarded and other protocol will be dropped.'
- Protocol:** A grid of checkboxes for various protocols:

<input type="checkbox"/> FTP (20,21)	<input type="checkbox"/> SSH (22)	<input type="checkbox"/> TELNET (23)	<input type="checkbox"/> SMTP(25)	<input type="checkbox"/> DNS(53)	<input type="checkbox"/> TFTP(69)	<input type="checkbox"/> HTTP (80,8080)	<input type="checkbox"/> POP3(110)
<input type="checkbox"/> SNMP (161,162)	<input type="checkbox"/> HTTPS (443)	<input type="checkbox"/> XRD_RDP (3389)	<input type="checkbox"/> BOOTP_DHCP (67,68)	<input type="checkbox"/> User_Define_a	<input type="checkbox"/> User_Define_b	<input type="checkbox"/> User_Define_c	<input type="checkbox"/> User_Defi
- Secure WAN port:** A grid of checkboxes for ports:

<input type="checkbox"/> Port01	<input type="checkbox"/> Port02	<input type="checkbox"/> Port03	<input type="checkbox"/> Port04	<input type="checkbox"/> Port05	<input type="checkbox"/> Port06	<input type="checkbox"/> Port07	<input type="checkbox"/> Port08
<input type="checkbox"/> Port13	<input type="checkbox"/> Port14	<input type="checkbox"/> Port15	<input type="checkbox"/> Port16	<input type="checkbox"/> Port17	<input type="checkbox"/> Port18	<input type="checkbox"/> Port19	<input type="checkbox"/> Port20
<input type="checkbox"/> 25	<input type="checkbox"/> 26						

Below the configuration area is a diagram illustrating the configuration example. It shows a 'Switch Engine' connected to 'Client side' (P2) and 'Server side' (P5). The 'Client side' includes TELNET Client, FTP Client, and HTTP Client. The 'Server side' includes TELNET Server, FTP Server, and HTTP Server. A note above the diagram says: 'Server side: check TCP/UDP destination port at the selected physical port.' A note below the diagram says: 'Server side: Don't care the protocol at these physical ports.' The caption below the diagram reads: 'Example: Set the secure WAN port at P5.'

You can enable or disable this function of per port.

If the “Function Enable” is “Enable”, please kindly check the following setting:

1. “Port Filtering Rule” –

“Deny”: the outgoing packets to the selected port with selected

protocol will be dropped and other protocols will be

forwarded.

“Allow”: the selected protocol will be forwarded and other protocol will be dropped.

2. “Secure Port” – choose secure ports which you want.

**Note 1:

- a. The secure WAN port should be set at the physical port which is connected to the server.
- b. Once this function is enabled, the switch will check the destination TCP/UTP port number at the outgoing direction of the secure WAN port.

If the condition matches, this packet will be dropped or forwarded.

**Note 2: The description of Secure WAN port is shown on the bottom of this screen.

3. “Protocol” – choose protocols which you want.
4. Click “Update” to confirm and finish the setting.

Now, the setting of “TCP/UDP Filter Configuration” is finished.

Spanning Tree: STP Bridge Settings

The screenshot shows the SmartSwitch Web-Base Controller interface. The main content area is titled "STP Bridge Settings". It contains two tables and a note.

STP Bridge Status (Configuration Table)

STP Mode	Bridge Priority (0~61440)	Hello Time (1~10 Sec)	Max Age (6~40 Sec)	Forward Delay (4~30 Sec)
<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="2"/>	<input type="text" value="20"/>	<input type="text" value="15"/>

Note: 2*(Forward Delay-1) >= Max Age
Max Age >= 2*(Hello Time-1)

STP Bridge Status (Status Table)

STP Mode	Bridge Priority:ID	Hello Time	Max Age	Forward Delay	Root ID
RSTP	32768:00 03 CE 01 17 D4	2	20	15	I'm the root bridge!

This setting is to avoid the loop network.

1. Select the "STP Mode" - choose "Disable", "STP" or "RSTP"
2. Set the "Bridge Priority" – Set the priority of the Bridge
3. Set the period of "Hello Time" packet – Provides the time period between root bridge configuration messages.
4. Set the "Max Age" – Indicates when the current configuration message should be deleted.
5. Set the "Forward Delay" time – Provides the length of time that bridges should wait before transitioning to a new state after a topology change. (If a bridge transitions too soon, not all network links might be ready to change their state,

- and loops can result.)
- Click “Update” to confirm and finish the setting. Now, the setting of “STP Bridge Settings” is finished.

Spanning Tree: STP Port Settings

The screenshot shows the SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The page title is "24Port 10/100 + 2Port Giga WebSwitch". The left sidebar contains a navigation menu with the following items: Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree (expanded), Trunking, Backup/Recovery, Miscellaneous, and Logout. Under "Spanning Tree", "STP Bridge Settings" and "STP Port Settings" are visible. The "STP Port Settings" section contains a form with the following fields:

Port No.	Priority (0~240)	RPC (Root Path Cost) (1~200000000)
<input type="text" value="1"/>	<input type="text" value="128"/>	<input type="text" value="0=Auto"/>

Below the form is a "Submit" button. The "STP Port Status" section displays a table with the following data:

Port No.	RPC	Priority	State	Status	Designated Bridge	Designated Port
1	Auto0	128	--	Disable	--	--
2	Auto0	128	--	Disable	--	--
3	Auto0	128	--	Disable	--	--
4	Auto0	128	--	Disable	--	--
5	Auto0	128	--	Disable	--	--
6	Auto0	128	--	Disable	--	--
7	Auto0	128	--	Disable	--	--
8	Auto0	128	--	Disable	--	--
9	Auto0	128	--	Disable	--	--
10	Auto0	128	--	Disable	--	--
11	Auto0	128	--	Disable	--	--
12	Auto0	128	--	Disable	--	--
13	Auto0	128	--	Disable	--	--
14	Auto0	128	--	Disable	--	--
15	Auto0	128	--	Disable	--	--
16	Auto0	128	--	Disable	--	--
17	Auto0	128	--	Disable	--	--
18	Auto0	128	--	Disable	--	--
19	Auto0	128	--	Disable	--	--
20	Auto0	128	--	Disable	--	--
21	Auto0	128	--	Disable	--	--
22	Auto0	128	--	Disable	--	--
23	Auto0	128	--	Disable	--	--
24	Auto200000	128	Designated Port	Forwarding	--	--
25	Auto0	128	--	Disable	--	--
26	Auto0	128	--	Disable	--	--

- Choose “Port No.” : Port 1 ~ Port 26
- Choose “Priority”: 0~ 240
- “RPC” = Root Path Cost: 0 = AUTO. When the loop is

found, the STP/RSTP will calculate the cost of its path.

Trunking: Link Aggregation Settings

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

SmartSwitch Web-Base Controller

24Port 10/100 + 2Port Giga WebSwitch

2 4 6 8 10 12 14 16 18 20 22 24
1 3 5 7 9 11 13 15 17 19 21 23 25 26

Administrator
Port Management
VLAN Setting
Per Port Counter
QoS Setting
Security
Spanning Tree
Trunking
Link Aggregation Settings
Backup/Recovery
Miscellaneous
Logout

Trunking

System Priority: 1 (1-65535)

Link Aggregation Algorithm: MAC SsdDir

Refresh

Member	Link Group 1				Link Group 2				Link Group 3	
	F1	F2	F3	F4	P5	P6	P7	P8	P25	P26
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
State	Disable				Disable				Disable	
Type	LACP				LACP				LACP	
Operation Key	1 (1-65535)				2 (1-65535)				3 (1-65535)	
Time Out	Short Time Out				Short Time Out				Short Time Out	
Activity	Passive				Passive				Passive	

Submit

Note: If you enable LACP on some specified ports and their link partners are normal port without LACP, these specified ports cannot transmit packet to receive packet from the link partner.

http://192.168.2.1/fm0k1.asp.htm

There are two groups to choose and max. for each group is 4 ports.

**Link Group 3: combo port - Port 25/Port 26

Click “Submit” to confirm and finish the setting.

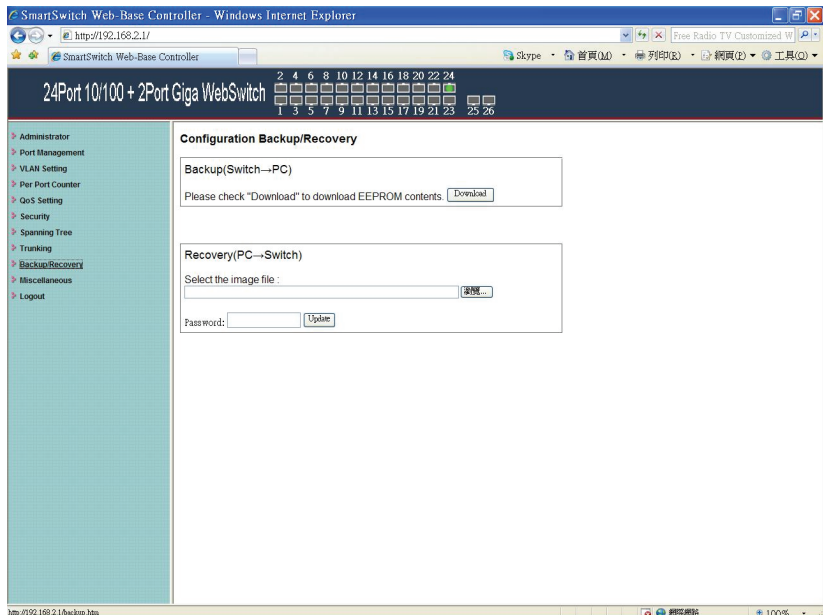
“State” – Enable / Disable

“Type” – LACP/ Static

“Activity” – Active/Passive: **Both switches use “LACP” to**

configure the Trunk, at least one of them should be “Active”.

Backup/Recovery



Follow the instruction on the screen to update the original setting.

“Backup” - Click “Download” to confirm the setting.

“Recovery” – select a file and key in the password → Click “Update”

to confirm the setting.

Miscellaneous: Miscellaneous Setting

The screenshot shows the 'Miscellaneous Setting' page in a web browser. The browser title is 'SmartSwitch Web-Base Controller - Windows Internet Explorer' and the address bar shows 'http://192.168.2.1/'. The page header includes '24Port 10/100 + 2Port Giga WebSwitch' and a port status grid. The left sidebar contains a navigation menu with items like Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout. The main content area is titled 'Miscellaneous Setting' and contains the following sections:

- Output Queue Aging Time:** A section with a dropdown menu set to 'ms' and a description: 'The output queue aging function allows the administrator to select the aging time of a packet stored in the output queue. A packet stored for a long time will lower the free packet buffer, resulting in the poor utilization of the buffer and the poor switch performance.'
- VLAN Striding:** A section with a dropdown menu set to 'Disable' and a description: 'When this function is enabled, the switch will forward a uni-cast packet to the destination port. No matter whether the destination port is in the same VLAN group.'
- IGMP Snooping V1 & V2:** A section with a dropdown menu set to 'Disable' and the text 'IGMP Snooping V1 & V2 function enable'.
- VLAN Uplink Setting:** A table with 24 columns representing ports (Port 01 to Port 24). Each column has two radio buttons: 'Uplink1' and 'Uplink2'. Below the table are two radio buttons: 'Clear Uplink1' and 'Clear Uplink2', and an 'Update' button.

1. “Output Queue Aging Time” - You can set queue aging time into different milliseconds or disable this function.
2. “VLAN Striding” – You can enable/disable this function.
3. “IGMP Snooping V1 & V2” – You can enable/disable this

function.

4. “VLAN Uplink Setting” – Set “uplink1 or uplink2” or “Clear uplink1” or “Clear uplink2”
5. Click “Update” to confirm and finish the setting.

Logout: You can click “Logout” to logout.

