

WS24POE Switch



User Manual

Version 01/01/2011

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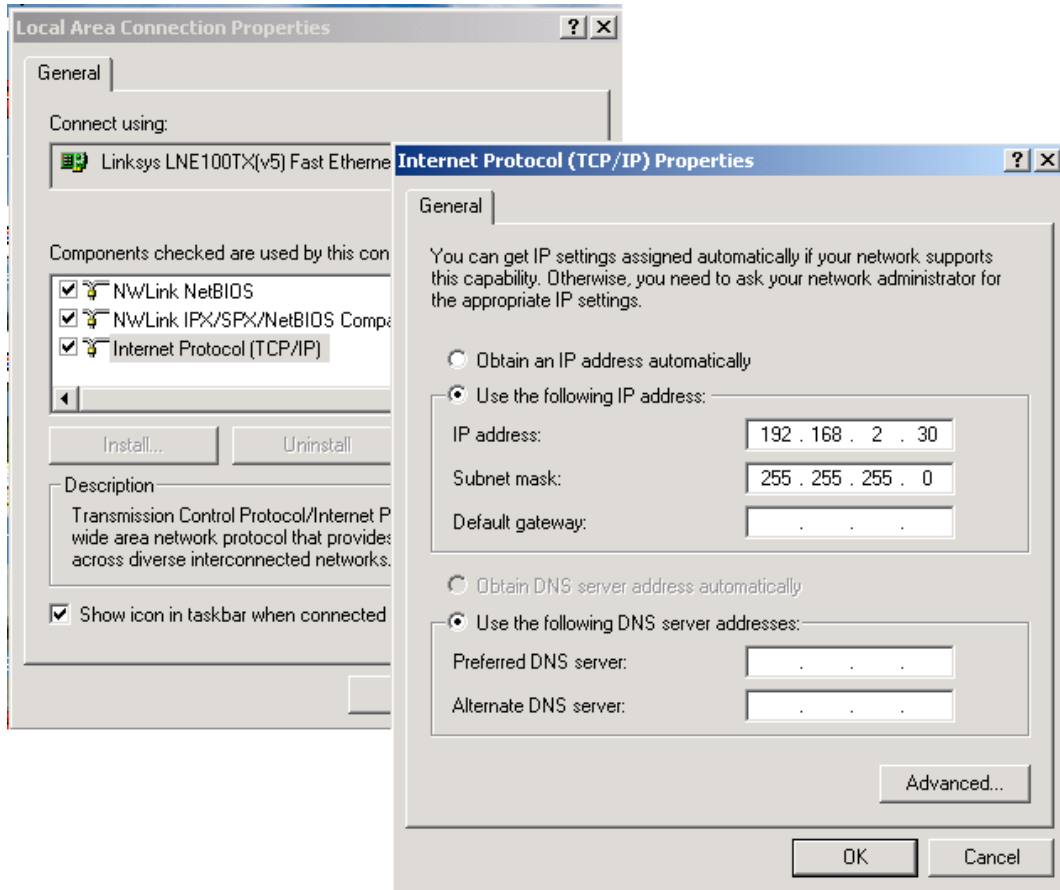
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Web Smart Switch Configure

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.



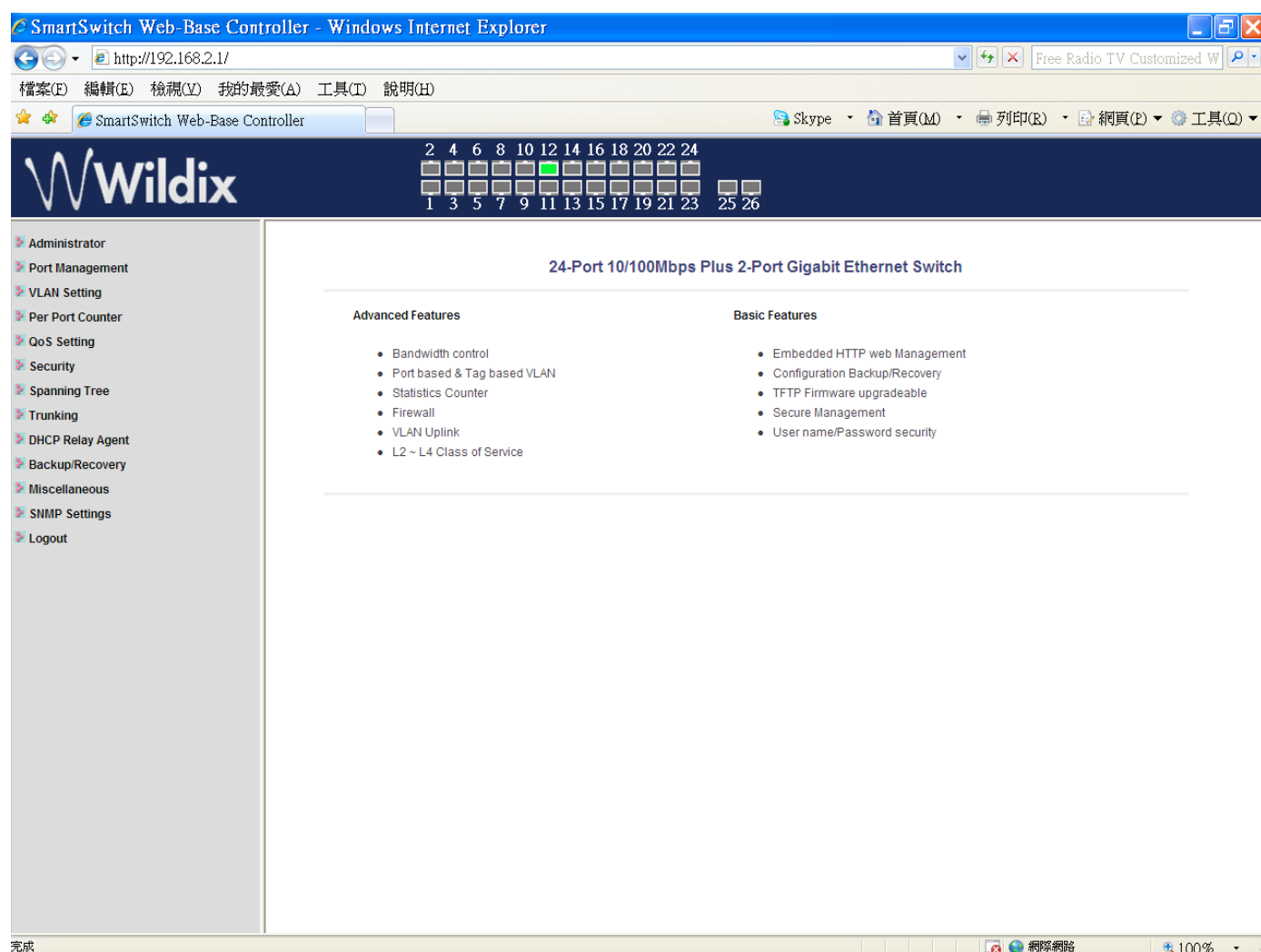
Step 3: Open the web browser (like IE...), and go to 192.168.2.1 Then you see the login screen.

The image shows a web browser window titled 'USER LOG IN'. It has a blue header bar. Below the header, it says 'Site: 192.168.2.1'. There are two input fields: 'ID:' and 'Password:'. Below these fields is an 'OK' button.

ID and the password: admin

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

- Administrator
- Port Management
- VLAN Setting
- Per Port Counter
- QoS Setting
- Security
- Spanning Tree
- Trunking
- DHCP Relay Agent
- Backup/Recovery
- Miscellaneous
- SNMP Settings
- Logout



Administrator: Authentication Configuration

The screenshot shows a web browser window titled "SmartSwitch Web-Base Controller - Windows Internet Explorer" with the address bar displaying "http://192.168.2.1/". The page header features the Wildix logo and a status bar with various icons and a "Free Radio TV Customized W" label. The left sidebar lists navigation options under "Administrator", with "Authentication Configuration" highlighted. The main content area is titled "Authentication Configuration" and contains a table with the following settings:

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

Below the table is an "Update" button. A note states: "Username & Password can only use 'a-z','A-Z','0-9','_','+','-','='."

1. Change the user name and the password.
 2. Click on "Update" to confirm.
- You can use the new user name and the password.

Administrator: System IP Configuration

The screenshot shows a web browser window titled "SmartSwitch Web-Base Controller - Windows Internet Explorer" with the address bar displaying "http://192.168.2.1/". The page header features the Wildix logo and a navigation menu. The left sidebar lists various configuration options, with "System IP Configuration" highlighted. The main content area is titled "System IP Configuration" and contains a table for setting the IP address, subnet mask, and gateway. The "IP Configure" section has radio buttons for "Static" (selected) and "DHCP". An "Update" button is located at the bottom of the configuration area.

Setting	Value
IP Address	192 . 168 . 2 . 1
Subnet Mask	255 . 255 . 255 . 0
Gateway	192 . 168 . 2 . 254
IP Configure	☒ Static ☐ DHCP

1. Change IP address: type the new IP address or select DHCP IP configuration.
 2. Click on "Update" to confirm the new change. "Setting Process OK!!" is shown on the screen.
- 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" with the address bar displaying "http://192.168.2.1/". The page features a dark blue header with the Wildix logo and a port status grid. The left sidebar lists various configuration options under the "Administrator" section, with "System Status" highlighted. The main content area, titled "System Status", contains a table with the following information:

MAC Address	00:03:ce:01:1f:cb
Number of Ports	24+2
Comment	switch MAX:15
System Version	V101210
☐ Idle Time Security	Idle Time: 0 (1~30 Minutes) ☐ Auto Logout(Default). ☐ Back to the last display.

An "Update" button is located at the bottom right of the table. Below the table, a note states: "Note: Comment name only can use 'a-z', 'A-Z', '_', '+', '-', '0-9'". The browser's status bar at the bottom shows the URL "http://192.168.2.1/status.htm" and a zoom level of 100%.

MAC address and system version are shown on the screen.

1. You can enter a new comment for this switch.
2. Click on "Update" to confirm.

The setting of "System Status" is finished.

Administrator: Load Default Setting



1. Click on "Load" to go back to the factory default setting.

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

Default setting is loaded.

Administrator: Firmware Update

The screenshot shows a web browser window titled "SmartSwitch Web-Base Controller - Windows Internet Explorer" with the address bar showing "http://192.168.2.1/". The browser's menu bar includes "檔案(F)", "編輯(E)", "檢視(V)", "我的最愛(A)", "工具(T)", and "說明(H)". The address bar also shows "Free Radio TV Customized W". The browser's toolbar includes "SmartSwitch Web-Base Controller", "Skype", "首頁(M)", "列印(R)", "網頁(P)", and "工具(Q)".

The Wildix logo is displayed on the left side of the page header. The page header also includes a navigation menu with the following items: "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".

The left sidebar contains the following menu 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", "DHCP Relay Agent", "Backup/Recovery", "Miscellaneous", "SNMP Settings", and "Logout".

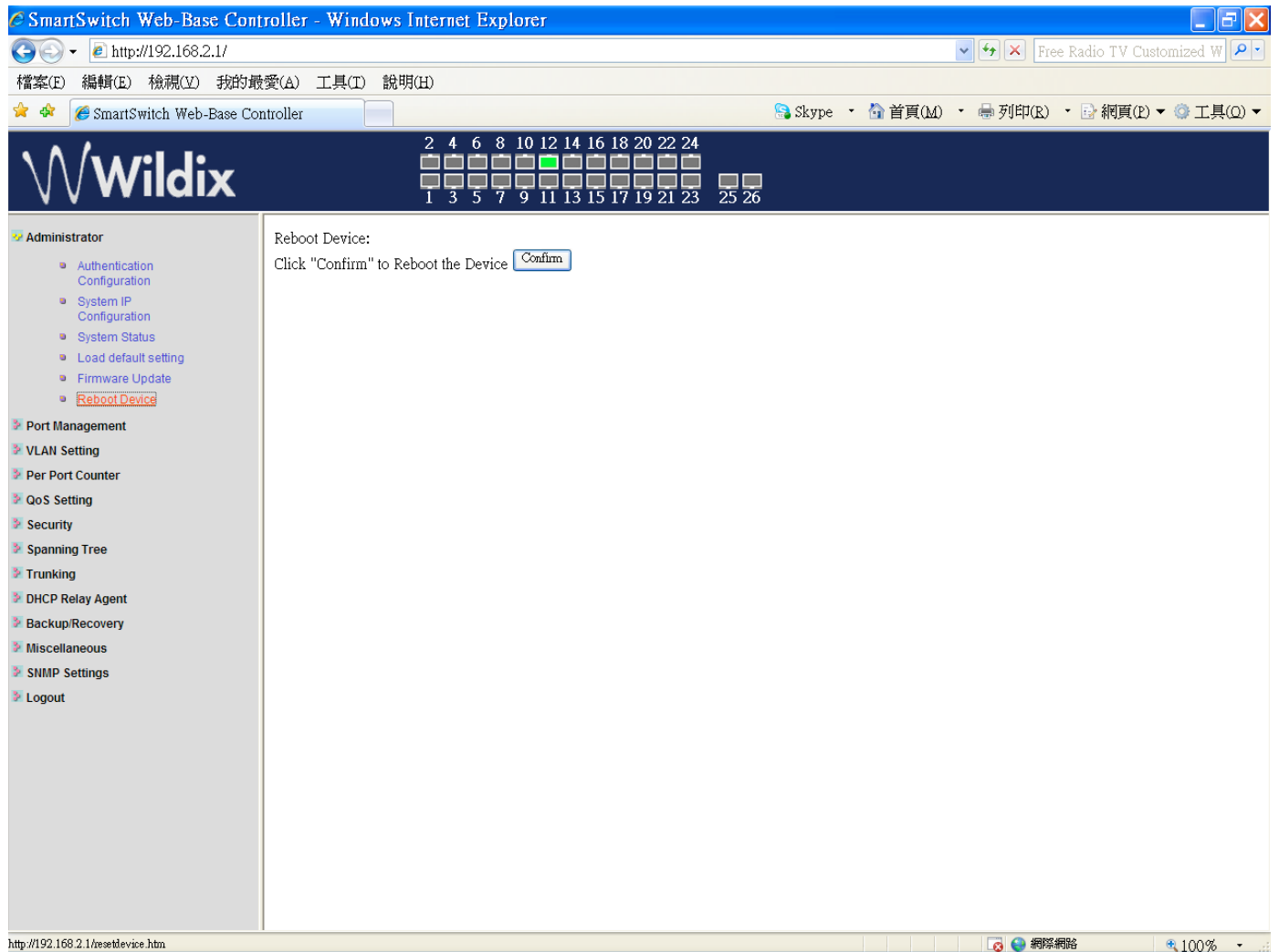
The main content area is titled "Firmware Update" and contains the following text: "Please input the password to continue the Firmware Update process." Below this text are two input fields: "Password" and "ReConfirm". An "Update" button is located below the "ReConfirm" field.

Below the "Update" button, there is a "Notice:" section with the following text: "After clicking the 'UPDATE' button, IF the firmware update webpage is not redirected correctly or is shown as 'Webpage not found'. Please connect to http://192.168.2.1".

The status bar at the bottom of the browser window shows the URL "http://192.168.2.1/firmwareUpdate.htm" and the zoom level "100%".

Follow the instruction on the screen to update the new firmware. Please contact your sales agents to get the latest firmware information.

Administrator: Reboot Device



1. Click on "Confirm" to reboot the device.

Port Management: Port Configuration

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The browser address bar displays `http://192.168.2.1/`. The Wildix logo is visible in the top left. The sidebar on the left lists various configuration options under 'Port Management', with 'Port Configuration' highlighted. The main content area is titled 'Port Configuration' and contains a table with the following columns: Function, Tx/Rx Ability, Auto-Negotiation, Speed, Duplex, Pause, Backpressure, and Addr. Learning. Below the table is an 'Update' button.

Function	Tx/Rx Ability	Auto-Negotiation	Speed	Duplex	Pause	Backpressure	Addr. Learning
Select Port No.	☐	☐	☐	☐	☐	☐	☐
	01 ☐ 02 ☐ 03 ☐ 04 ☐ 05 ☐ 06 ☐ 07 ☐ 08 ☐ 09 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐						
Update							

Select the "Port No." to configure the modes below:

1. "Auto-Nego" - 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

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

SmartSwitch Web-Base Controller

Wildix

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

- Port Configuration
- Port Mirroring
- Bandwidth Control
- Broadcast Storm Control
- POE

VLAN Setting

Per Port Counter

QoS Setting

Security

Spanning Tree

Trunking

DHCP Relay Agent

Backup/Recovery

Miscellaneous

SNMP Settings

Logout

Port Mirroring

Dest 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
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Monitored Packets:

Source 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
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Multi to Multi Sniffer function

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: click on the check box of the port.
3. Click on "Update" to save the setting.

The setting of "Port Mirroring" is finished.

Port Management: Bandwidth Control

SmartSwitch Web-Base Controller - Windows Internet Explorer
 http://192.168.2.1/

檔案(F) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

SmartSwitch Web-Base Controller

Skype 首頁(M) 列印(R) 網頁(P) 工具(Q)

Wildix

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
 Port Configuration
 Port Mirroring
Bandwidth Control
 Broadcast Storm Control
 POE

VLAN Setting
 Per Port Counter
 QoS Setting
 Security
 Spanning Tree
 Trunking
 DHCP Relay Agent
 Backup/Recovery
 Miscellaneous
 SNMP Settings
 Logout

Bandwidth Control

Port No	Tx Rate	Rx Rate
01	(0~255) (0:Full Speed)	(0~255) (0:Full Speed)

Speed Base
 Low
 (1)32Kbps Tx/Rx bandwidth resolution for port 1~ port 26.
 Actual Tx/Rx bandwidth=Rate value x 32 kbps. The rate value is 1~255.
 High:
 (1)256Kbps Tx/Rx bandwidth resolution for port 1~ port 24.
 Actual Tx/Rx bandwidth=Rate value x 256Kbps. The rate value is 1~255.
 When link speed is 10MB. The rate value is 1~39.
 (2)the bandwidth resolution is 2048Kbps for port 25, port 26.
 Actual Tx/Rx bandwidth=Rate value x 2048Kbps. The rate value is 1~255.
 When link speed is 10MB. The rate value is 1~4.
 When link speed is 100MB. The rate value is 1~48.

Update LoadDefault

If the link speed of selected port is lower than the rate that you seting, this system will use the value of link speed as your setting rate.

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	---

http://192.168.2.1/DataRate.htm

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 on "Update" to confirm the setting or click on "LoadDefault".

The setting of "Bandwidth Control" is finished.

Port Management: Broadcast Storm Control

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The address bar shows <http://192.168.2.1/>. The page title is "SmartSwitch Web-Base Controller". The sidebar on the left contains the following navigation options: Administrator, Port Management (selected), VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, DHCP Relay Agent, Backup/Recovery, Miscellaneous, SNMP Settings, and Logout. Under Port Management, the sub-options are: Port Configuration, Port Mirroring, Bandwidth Control, Broadcast Storm Control (selected), and POE. The main content area is titled "Broadcast Storm Control". It features a "Threshold" input field with the value "63" and a range "1~63". Below this is a table with 26 columns representing ports (1 to 26) and two rows for "Enable Port". Each cell in the table contains a checkbox. An "Update" button is located below the table. A text box explains the threshold: "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". A note states: "Note: This effect may be not significant for long broadcast packet, since the broadcast packet count passing through the switch in a time unit is probably less than the specified number." The status bar at the bottom shows the URL <http://192.168.2.1/Broadcast.htm> and a zoom level of 100%.

Administrator

Port Management

- Port Configuration
- Port Mirroring
- Bandwidth Control
- Broadcast Storm Control
- POE

VLAN Setting

Per Port Counter

QoS Setting

Security

Spanning Tree

Trunking

DHCP Relay Agent

Backup/Recovery

Miscellaneous

SNMP Settings

Logout

Broadcast Storm Control

Threshold	63 1~63												
Enable 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 ☐

Update

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

Note: This effect may be not significant for long broadcast packet, since the broadcast packet count passing through the switch in a time unit is probably less than the specified number.

1. "Threshold" - Set the threshold from 1~63.
 2. "Enable Port" - per port to define the status of broadcast packets.
 3. Click on "Update" to confirm the setting.
- The setting of "Broadcast Storm Control" is finished.

Port Management: PoE Configuration

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

SmartSwitch Web-Base Controller

Wildix

Administrator

Port Management

- Port Configuration
- Port Mirroring
- Bandwidth Control
- Broadcast Storm Control
- POE

VLAN Setting

Per Port Counter

QoS Setting

Security

Spanning Tree

Trunking

DHCP Relay Agent

Backup/Recovery

Miscellaneous

SNMP Settings

Logout

POE Configuration

Port	1	2	3	4	5	6	7	8
Enable	☒	☒	☒	☒	☒	☒	☒	☒
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	☒	☒	☒	☒	☒	☒	☒	☒
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	☒	☒	☒	☒	☒	☒	☒	☒
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: Update the power control function.
Enable ☒: Power On

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

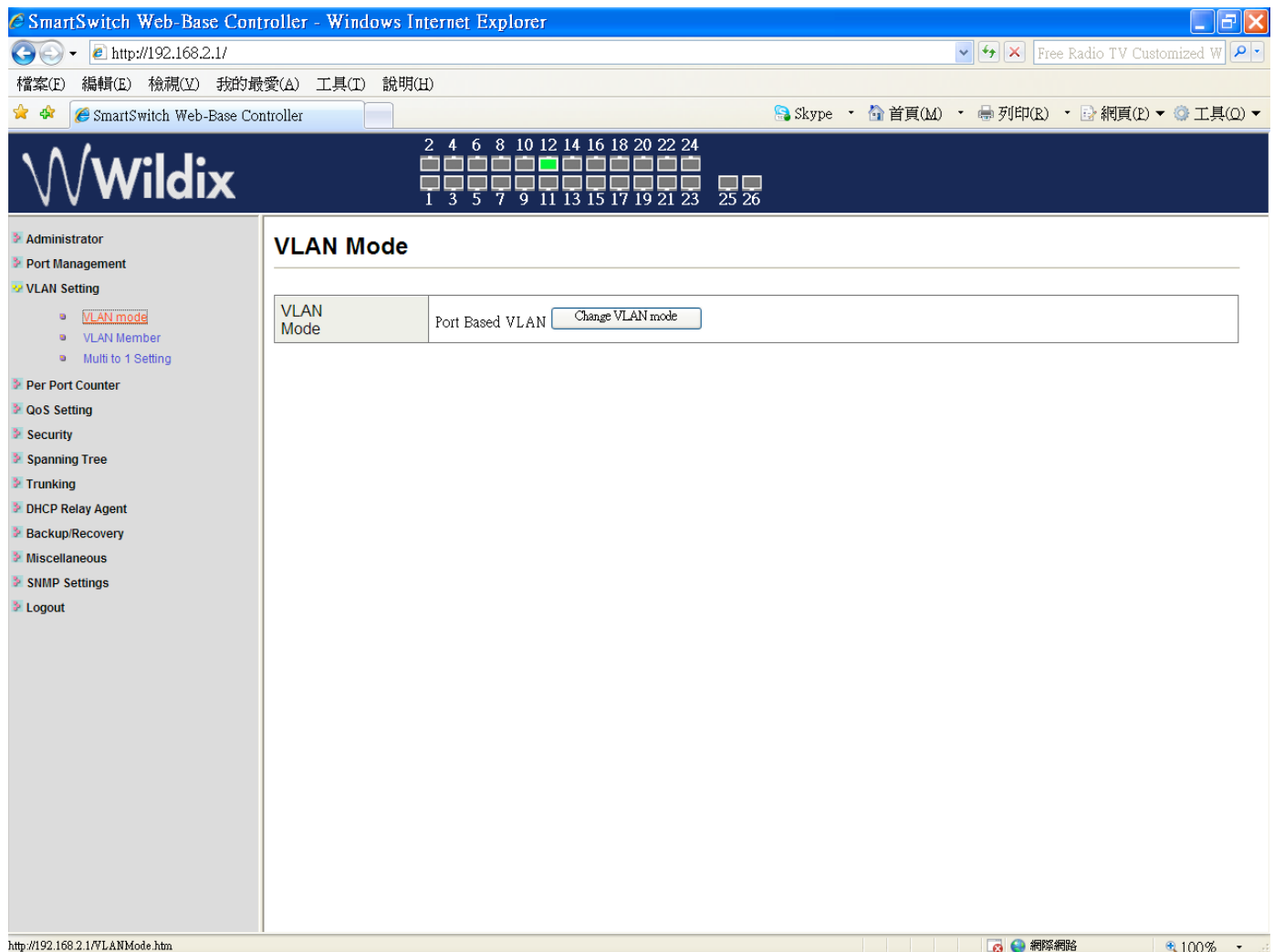
1. Enable: POE of the port supplies power to the attached PD (Powered Device) -> Full power for each port

2. PSE Current & Minimum Output Power: The status of the port Current and Minimum output power.

3. POE class: each POE port detects the class of the attached PD (Powered Device)

4. Click on "Update" to confirm and finish the setting.

VLAN Setting: VLAN Mode



There are two VLAN modes: Port Based VLAN and Tagged VLAN. Click on "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.

The setting of "VLAN Mode" is finished.

VLAN Setting: VLAN Member Setting (Port Based)

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The browser address bar indicates the URL is <http://192.168.2.1/>. The page title is "SmartSwitch Web-Base Controller - Windows Internet Explorer". The sidebar on the left contains the following menu items: Administrator, Port Management, VLAN Setting (selected), Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, DHCP Relay Agent, Backup/Recovery, Miscellaneous, SNMP Settings, and Logout. The main content area is titled "VLAN Member Setting (Port Based)". It features a table with columns for "Port" and "Dest PORT". The "Port" column has a dropdown menu set to "01" and a "Read" button. The "Dest PORT" column lists ports from 01 to 26. Below the table, there are "Update" and "LoadDefault" buttons.

Port	01	02	03	04	05	06	07	08	09	10	11	12	13
Dest PORT	01	02	03	04	05	06	07	08	09	10	11	12	13
select	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Dest PORT	14	15	16	17	18	19	20	21	22	23	24	25	26
select	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒

You can select a port group.

1. Click on the port numbers that you want to put into the selected VLAN group.
2. Click on "Update" to confirm and finish the setting.
3. Click on "LoadDefault" to go back to the original factory setting. **Port-Based: 26 Groups / Tag-Based: 30 Groups

The setting of "VLAN Mode" is finished.

VLAN Setting: Multi to 1 Setting

Multi to 1 Setting

Destination PortNo. 01

Current Setting Port:-

Disable Port	01	02	03	04	05	06	07	08	09	10	11	12	13
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

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

1. A example for Multi-to-1 structure

**Destination Port/
Current Setting**

22

Ports

01

02

...

24

VLAN Groups

1

2

...

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 the easy setting of the switch VLAN to "VLAN Per Port".

1. Select "Destination Port No".
2. Select "Disable Port"
3. "Disable Port" – select the port that you don't want to use
4. Click on "Update" to confirm and finish the setting.

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

Per Port Counter: Counter Category

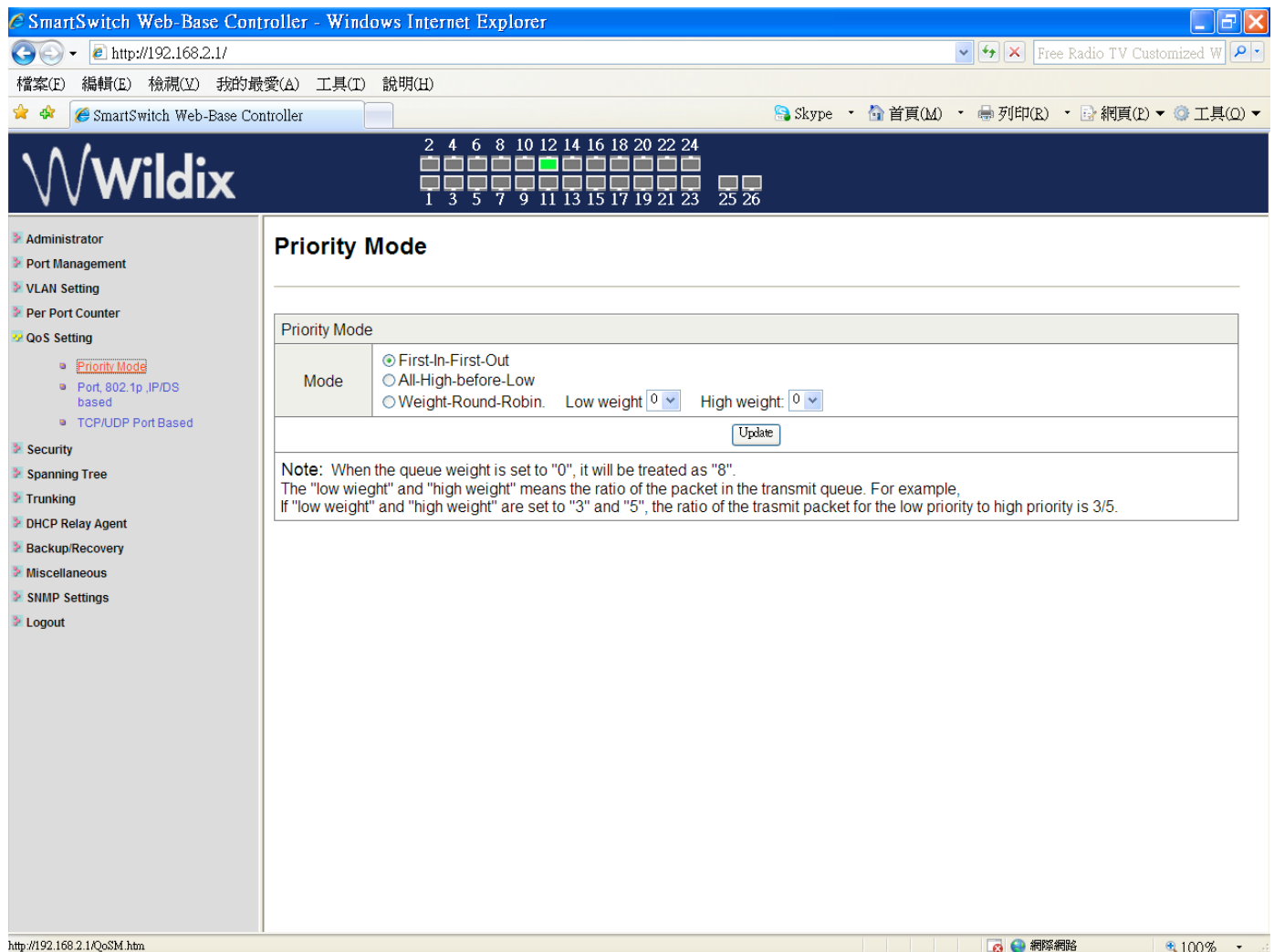
The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The main content area is titled "Counter Category". It features a "Counter Mode Selection" dropdown set to "Transmit Packet & Receive Packet" and an "Update" button. Below this is a table with the following data:

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	705	760
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0

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

Click on "Refresh" or "Clear" the data.

QoS Setting: Priority Mode



There are three Priority Modes to select.

1. "First-in-First-Service" - the first receiving packet is firstly transmitted.
2. "All-High-before-Low" – all packets are 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 on "Update" to confirm and finish the setting.

QoS Setting: Class of Service

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

SmartSwitch Web-Base Controller

Class of Service Configuration

☒ =Enable High Priority

Port No./Mode	Port Base	VLAN Tag	IP / DS	Port No./Mode	Port Base	VLAN Tag	IP / DS
1	☐	☐	☐	14	☐	☐	☐
2	☐	☐	☐	15	☐	☐	☐
3	☐	☐	☐	16	☐	☐	☐
4	☐	☐	☐	17	☐	☐	☐
5	☐	☐	☐	18	☐	☐	☐
6	☐	☐	☐	19	☐	☐	☐
7	☐	☐	☐	20	☐	☐	☐
8	☐	☐	☐	21	☐	☐	☐
9	☐	☐	☐	22	☐	☐	☐
10	☐	☐	☐	23	☐	☐	☐
11	☐	☐	☐	24	☐	☐	☐
12	☐	☐	☐	25	☐	☐	☐
13	☐	☐	☐	26	☐	☐	☐

Update

As long as any of three COS schemes(802.1p,IP TOS/DS or Port Base) is mapped to "high", the data packet will be treated as the high priority.

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

SmartSwitch Web-Base Controller

Class of Service Configuration

Protocol	Option
FTP(20,21)	F-I-F-O
SSH(22)	F-I-F-O
TELNET(23)	F-I-F-O
SMTP(25)	F-I-F-O
DNS(53)	F-I-F-O
TFTP(69)	F-I-F-O
HTTP(80,8080)	F-I-F-O
POP3(110)	F-I-F-O
NEWS(119)	F-I-F-O
SNTP(123)	F-I-F-O
NetBIOS(137~139)	F-I-F-O
IMAP(143,220)	F-I-F-O
SNMP(161,162)	F-I-F-O
HTTPS(443)	F-I-F-O
MSN(1863)	F-I-F-O
XRD_RDP(3389)	F-I-F-O
QQ(4000,8000)	F-I-F-O
ICQ(5190)	F-I-F-O

You can set QoS mode of port.

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 is transferred based on the number of "Weight-Round-Robin" on **QoS Setting: Priority Mode**.

**Weight-Round-Robin - Q1~Q8

**"Drop" - packets are dropped.

2. "Priority Setting" - The packets with special IP are transmitted first.
3. "802.1p" – Priority mapping table as the screen shows
4. "Physical port" - you can select the port which you want to configure as Q1~Q8 priority.
5. Click on "Update" to confirm and finish the setting.

The setting of "Class of Service" is finished.

Security: MAC Address Binding

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

SmartSwitch Web-Base Controller

Wildix

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
 MAC Address Binding
 TCP/UDP Filter
Spanning Tree
Trunking
DHCP Relay Agent
Backup/Recovery
Miscellaneous
SNMP Settings
Logout

MAC Address Binding

Port No.	MAC Address
1	MAC Address Input Fields Read

Select Port Binding

Note: If you enable the MAC address binding function, the address leaning function will be disabled automatically.

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

http://192.168.2.1/LockMAC.htm

Set special MAC address to activate on the selected port

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

The setting of "MAC Address Filter" is finished.

Security: TCP_UDP Filter Configuration

TCP_UDP Filter Configuration

Function Enable:

Port Filtering Rule:
 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	☐ FTP (20,21)	☐ SSH (22)	☐ TELNET (23)	☐ SMTP(25)	☐ DNS(53)	☐ TFTP(69)	☐ HTTP (80,8080)	☐ POP3(110)
	☐ SNMP (161,162)	☐ HTTPS (443)	☐ XRD_RDP (3389)	☐ BOOTP_DHCP (67,68)	☐ User_Define_a	☐ User_Define_b	☐ User_Define_c	☐ User_Define_d
Secure WAN port	☐ Port01	☐ Port02	☐ Port03	☐ Port04	☐ Port05	☐ Port06	☐ Port07	☐ Port08
	☐ Port13	☐ Port14	☐ Port15	☐ Port16	☐ Port17	☐ Port18	☐ Port19	☐ Port20
	☐ 25 ☐ 26							

Note: The description of Secure WAN port is shown below.

You can enable or disable this function per port.

If the "Function Enable" is "Enabled", please check the following setting:

1. "Port Filtering Rule" –

"Deny": outgoing packets to the selected port with selected protocol are dropped and other protocols are forwarded. "Allow": selected protocols are forwarded and other protocols are dropped.

2. "Secure Port" – select secure ports.

**Note 1:

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

If the condition matches, this packet is dropped or forwarded.

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

3. "Protocol" – select protocols.

4. Click on "Update" to confirm and finish the setting. The setting of "TCP/UDP Filter Configuration" is finished.

Spanning Tree: STP Bridge Settings

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The address bar shows <http://192.168.2.1/>. The sidebar on the left contains the following navigation items: Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree (selected), Trunking, DHCP Relay Agent, Backup/Recovery, Miscellaneous, SNMP Settings, and Logout. Under the 'Spanning Tree' item, there are sub-items: STP Bridge Settings (highlighted), STP Port Settings, and Loopback Detection.

STP Bridge Settings

Spanning Tree Settings				
STP Mode	Bridge Priority	Hello Time	Max Age	Forward Delay
	(0~61440)	(1~10 Sec)	(6~40 Sec)	(4~30 Sec)
Submit				

Note: $2 * (\text{Forward Delay} - 1) \geq \text{Max Age}$,
 $\text{Max Age} \geq 2 * (\text{Hello Time} + 1)$
Bridge Priority must be multiples of 4096

Note: If you enable the MAC address binding function, the address learning function will be disabled automatically. Then both RSTP/STP and address learning will be affected.

Bridge Status				
STP Mode	Bridge ID	Hello Time	Max Age	Forward Delay
RSTP	32768:00 03 CE 01 1F CB	2	20	15

Root Status			
Root ID	Hello Time	Max Age	Forward Delay
I'm the root bridge!	2	20	15

This setting is brought to avoid the loop network.

1. Select the "STP Mode"- select "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. After a topology is changed, bridges should wait before transitioning to a new state (If a bridge transition is very fast, some network links might not be ready to change their states and loops might occur.)
6. Click on "Update" to confirm and finish the setting.

The setting of "STP Bridge Settings" is finished.

Spanning Tree: STP Port Settings

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The address bar shows <http://192.168.2.1/>. The top status bar displays the Wildix logo and a row of 26 port status indicators (2-26), with port 12 highlighted in green. The left sidebar contains a navigation menu with the following items: Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree (selected), Trunking, DHCP Relay Agent, Backup/Recovery, Miscellaneous, SNMP Settings, and Logout. Under the Spanning Tree menu, the following sub-items are listed: STP Bridge Settings, STP Port Settings (selected), and Loopback Detection. The main content area is titled "STP Port Settings" and contains a form with the following fields: Port No. (a dropdown menu), Priority (0~240), and RPC (1~2000000000). The RPC field is set to "0=AUTO". Below the form is a "Submit" button and a note: "Priority should be a multiple of 16". Below the form is a table titled "STP Port Status" with the following columns: Port No., RPC, Priority, State, Status, Designated Bridge, and Designated Port. The table lists the status for ports 1 through 12. Ports 1 through 11 are in a "Disable" state, while port 12 is in a "Designated" state and "Forwarding" status.

STP Port Status						
Port No.	RPC	Priority	State	Status	Designated Bridge	Designated Port
1	Auto:0	0x80	--	Disable	--	--
2	Auto:0	0x80	--	Disable	--	--
3	Auto:0	0x80	--	Disable	--	--
4	Auto:0	0x80	--	Disable	--	--
5	Auto:0	0x80	--	Disable	--	--
6	Auto:0	0x80	--	Disable	--	--
7	Auto:0	0x80	--	Disable	--	--
8	Auto:0	0x80	--	Disable	--	--
9	Auto:0	0x80	--	Disable	--	--
10	Auto:0	0x80	--	Disable	--	--
11	Auto:0	0x80	--	Disable	--	--
12	Auto:200000	0x80	Designated	Forwarding	--	--

1. Select "Port No.": Port 1 ~ Port 26

2. Select "Priority": 0~ 240

3. "RPC" = Root Path Cost: 0 = AUTO. When the loop is found, the STP/RSTP calculates the cost of its path.

Spanning Tree: Loopback Detection Settings

The screenshot displays the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser window. The address bar shows the URL <http://192.168.2.1/>. The Wildix logo is visible in the top left corner of the page. A navigation sidebar on the left lists various configuration options, with 'Spanning Tree' expanded to show 'STP Bridge Settings', 'STP Port Settings', and 'Loopback Detection' (which is highlighted). The main content area is titled 'Loopback Detection Settings' and contains three configuration fields: 'Loopback Detect Function' set to 'Disable', 'Auto Wake Up' set to 'Disable', and 'Wake-Up Time Interval' set to '10 sec'. A 'Submit' button is located below these fields. Below the settings is a 'Reset All Ports' button and a table with 16 rows, each representing a port. The table has two columns: 'Port No.' and 'Status'. All ports (1 through 16) show a status of '--'.

Port No.	Status
1	--
2	--
3	--
4	--
5	--
6	--
7	--
8	--
9	--
10	--
11	--
12	--
13	--
14	--
15	--
16	--

Use the Spanning Tree > Loopback detection page to configure loopback detection on an interface. When loopback detection is enabled and a port receives its own BPDU, the detection agent drops the loopback BPDU, and places the interface in discarding mode.

This loopback state can be released manually or automatically. If the interface is configured for automatic loopback release, then the port returns to the forwarding state under one of the following conditions:

- ◆ The interface receives any other BPDU except its own;
- ◆ The interfaces's link status changes to link down and then link up again;
- ◆ The interface ceases to receive its own BPDUs in a forward delay interval.

NOTE: If loopback detection is not enabled and an interface receives its own BPDU, then the interface drops the loopback BPDU according to IEEE Standard 802.1w-2001 9.3.4 (Note 1).

NOTE: Loopback detection is not active if Spanning Tree is disabled on the switch.

NOTE: When configured for manual release mode, then a link down/up event does not release the port from the discarding state.

Trunking: Link Aggregation Settings

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The address bar shows <http://192.168.2.1/>. The Wildix logo is at the top left. A sidebar on the left contains a tree view with options: Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking (selected), Link Aggregation Settings (highlighted), DHCP Relay Agent, Backup/Recovery, Miscellaneous, SNMP Settings, and Logout. The main content area is titled 'Trunking' and contains the following settings:

- System Priority:** 1 (1~65535)
- Link Aggregation Algorithm:** MAC Src&Dst
- Submit** button
- Refresh** button

Member	Link Group 1				Link Group 2				Link Group 3	
	P1	P2	P3	P4	P5	P6	P7	P8	P25	P26
	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
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.

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

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

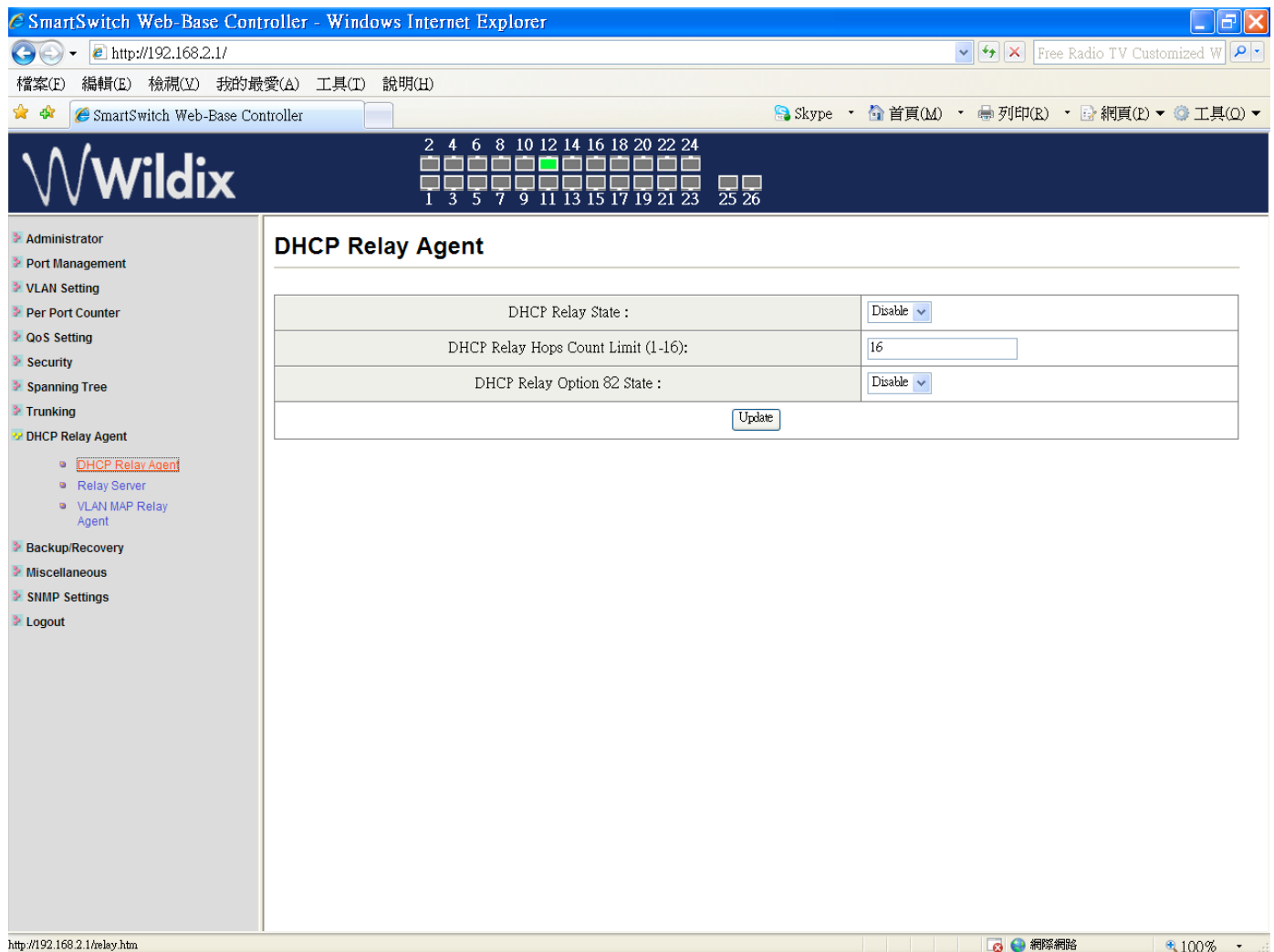
Click on "Submit" to confirm and finish the setting.

"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"**

DHCP Relay Agent: DHCP Relay Agent



This web page allows the administrator to enable/disable DHCP Relay Agent function.

◆DHCP Relay State

Allow the administrator to enable/disable Relay Agent function.

◆DHCP Relay Hops Count Limit

Specify the maximum number of Relay Agent traveling from DHCP agent to DHCP server.

◆DHCP Relay Option 82

The pre-condition for enabling/disabling this function is that DHCP Relay State is set to "enable". Once the Relay State is set to "enable", the administrator can enable/disable Option 82, depending on whether the Option 82 information is required.

DHCP Relay Agent: Relay Server (DHCP Server IP List)

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

SmartSwitch Web-Base Controller

Wildix

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
DHCP Relay Agent
 DHCP Relay Agent
 Relay Server
 VLAN MAP Relay Agent
Backup/Recovery
Miscellaneous
SNMP Settings
Logout

DHCP Relay Agent

DHCP Server IP

DHCP Server IP List

http://192.168.2.1/relaySvr.htm

The IP address of DHCP server, which can be relayed by this Relay Agent, should be specified on this web page.

DHCP Relay Agent: Relay Agent (MAP List)

The screenshot displays the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser window. The address bar shows the URL `http://192.168.2.1/`. The interface features a sidebar menu on the left with various configuration options, including Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, DHCP Relay Agent, Backup/Recovery, Miscellaneous, SNMP Settings, and Logout. The DHCP Relay Agent section is currently selected.

The main content area is titled "DHCP Relay Agent" and contains a form for adding a new entry. The form has two input fields: "VLAN ID" (containing the value 14094) and "Map Server IP" (with a dropdown menu). An "Add" button is located to the right of the form.

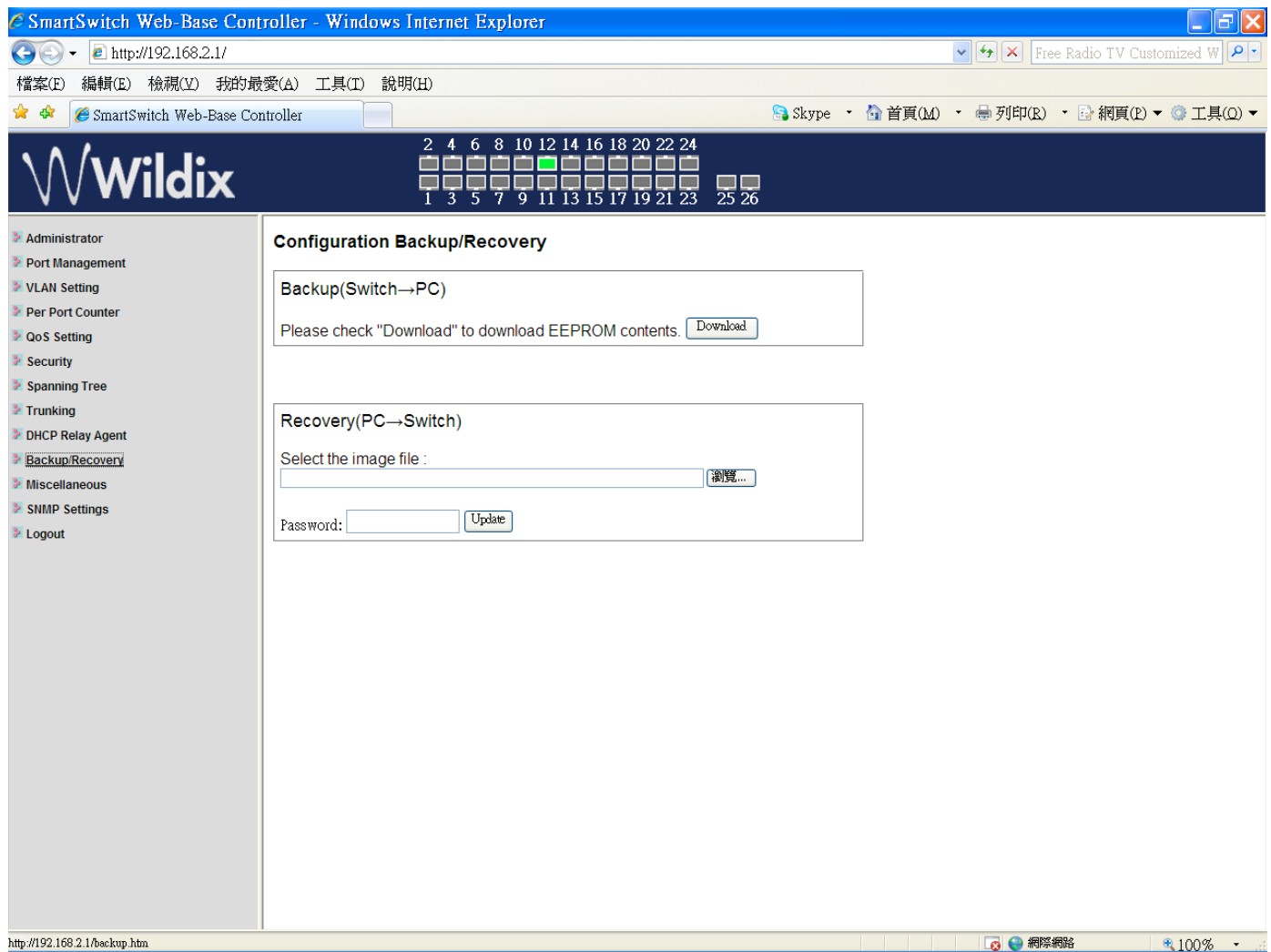
Below the form is a section titled "MAP List" which contains a table with the following columns: "VLAN ID", "Server IP", and "Action". The table is currently empty.

VLAN to Server IP Map

This web page defines the relationship between the VLAN group and the server IP address.

Note: One server should belong to only one VLAN ID. If you set the same server IP address to different VLAN ID, the warning message will show up, as the figure shown below. You can set more than one server IP address in a VLAN ID.

Backup/Recovery

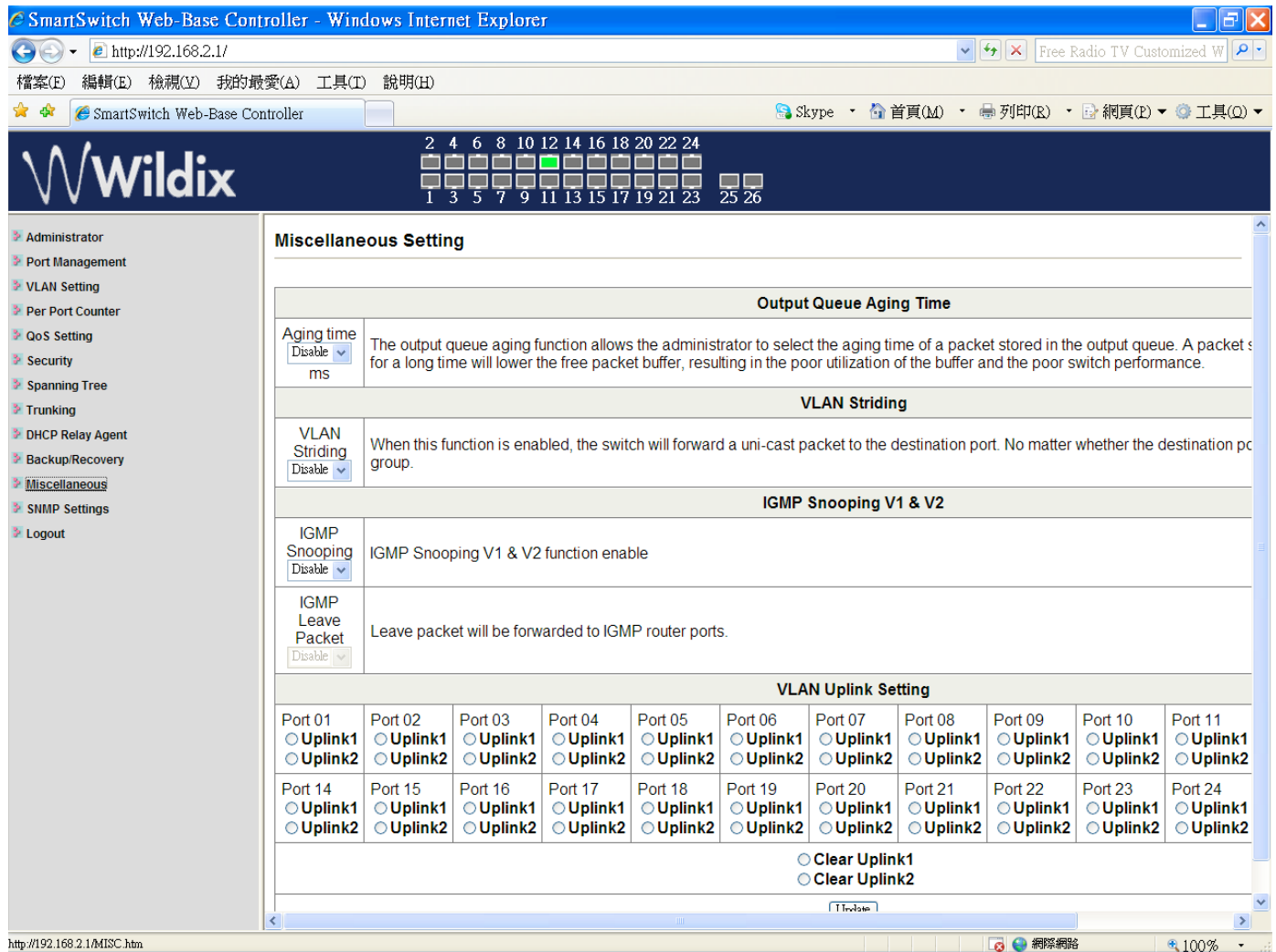


Follow the instruction on the screen to update the original setting.

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

“Recovery” – select a file and enter the password -> Click on “Update” to confirm the setting.

Miscellaneous: Miscellaneous Setting



1. "Output Queue Aging Time" - You can set queue aging time into different milliseconds or disable this function.
2. "VLAN Striding" – Enable/disable this function.
3. "IGMP Snooping V1 & V2" – Enable/disable this function.
4. "VLAN Uplink Setting" - Set "uplink1 or uplink2" or "Clear uplink1" or "Clear uplink2"
5. Click on "Update" to confirm and finish the setting.

SNMP Settings: SNMP Settings

SmartSwitch Web-Base Controller - Windows Internet Explorer

http://192.168.2.1/

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SmartSwitch Web-Base Controller

Skype 首頁(M) 列印(R) 網頁(P) 工具(Q)

Wildix

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
DHCP Relay Agent
Backup/Recovery
Miscellaneous
SNMP Settings
Logout

SNMP Settings

Community Settings	
Community Name	Access Right
public	Read/Write
	Read Only
Update	

SNMP Settings	
System Description	IP1826
System Contact	ICPlus
System Location	ICPlus
Update	

SNMP Trap Settings	
Trap State	Enable
Update	

http://192.168.2.1/snmp.htm

Community Name: The administrator can enter the community name.

Access Right: This field defines the access attribute. "Read only" means the administrator can view this community only. "Read/Write" means the administrator can view and modify this community.

System Description: The administrator can enter a device name for the identification in the network.

System Contact: Contact person responsible for maintaining network.

System Location: Location of this device.

Trap State: Enable/Disable trapped event. The trapped events are: (1) Power up event; (2) Physical port status change event.

Logout: You can click "Logout" to logout.

Contacts

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