

# WS16POE Switch



## User Manual

Version: 01/01/2011

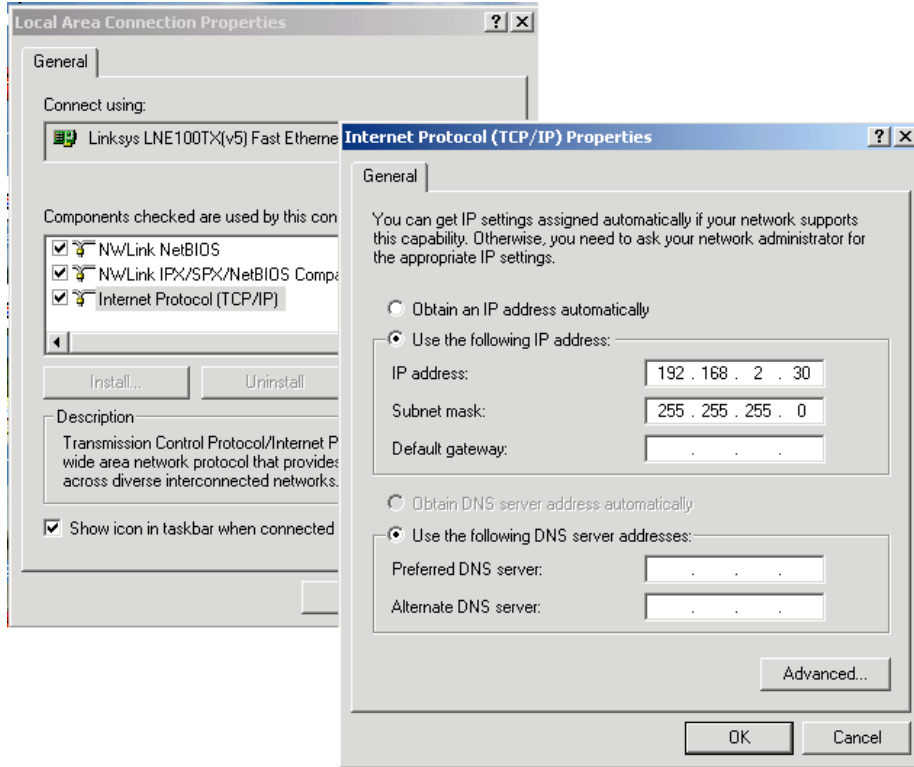
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## Web Smart Switch Configure

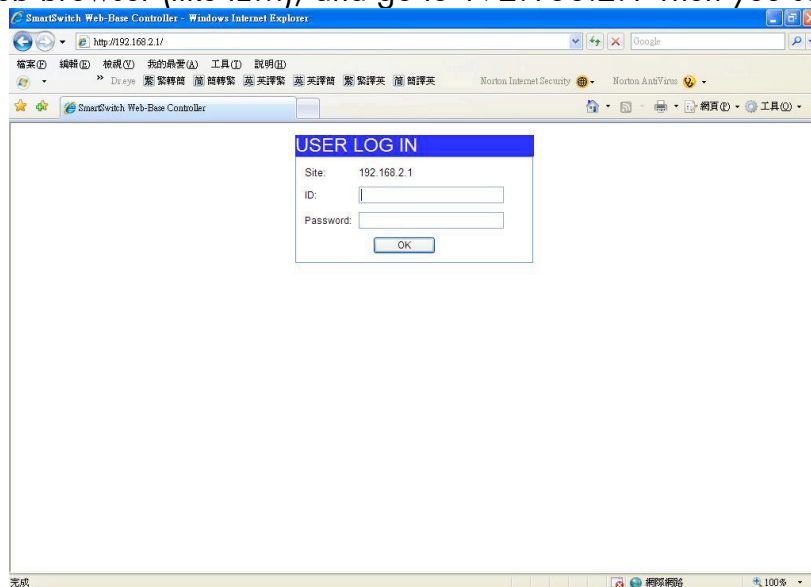
Please follow the steps to configure this Web Smart switch.

**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.

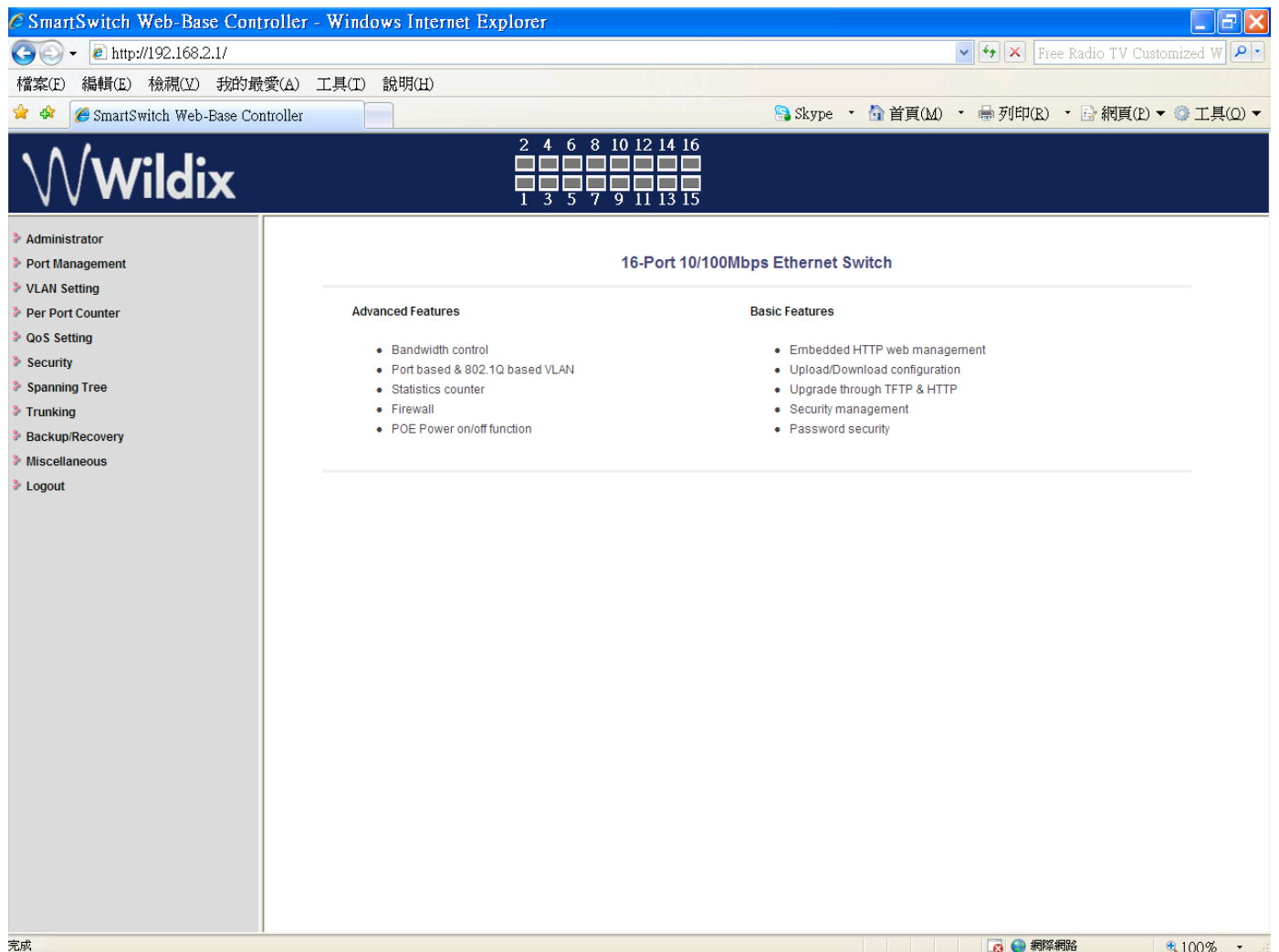


ID and the password: admin

**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

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The browser title is "SmartSwitch Web-Base Controller - Windows Internet Explorer" and the address bar shows "http://192.168.2.1/". The Wildix logo is visible in the top left. The navigation menu on the left includes "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", and "Logout".

### Authentication Configuration

Setting	Value
Username	<input type="text" value="admin"/> max:15
Password Confirm	<input type="password" value="....."/> max:15 <input type="password" value="....."/>

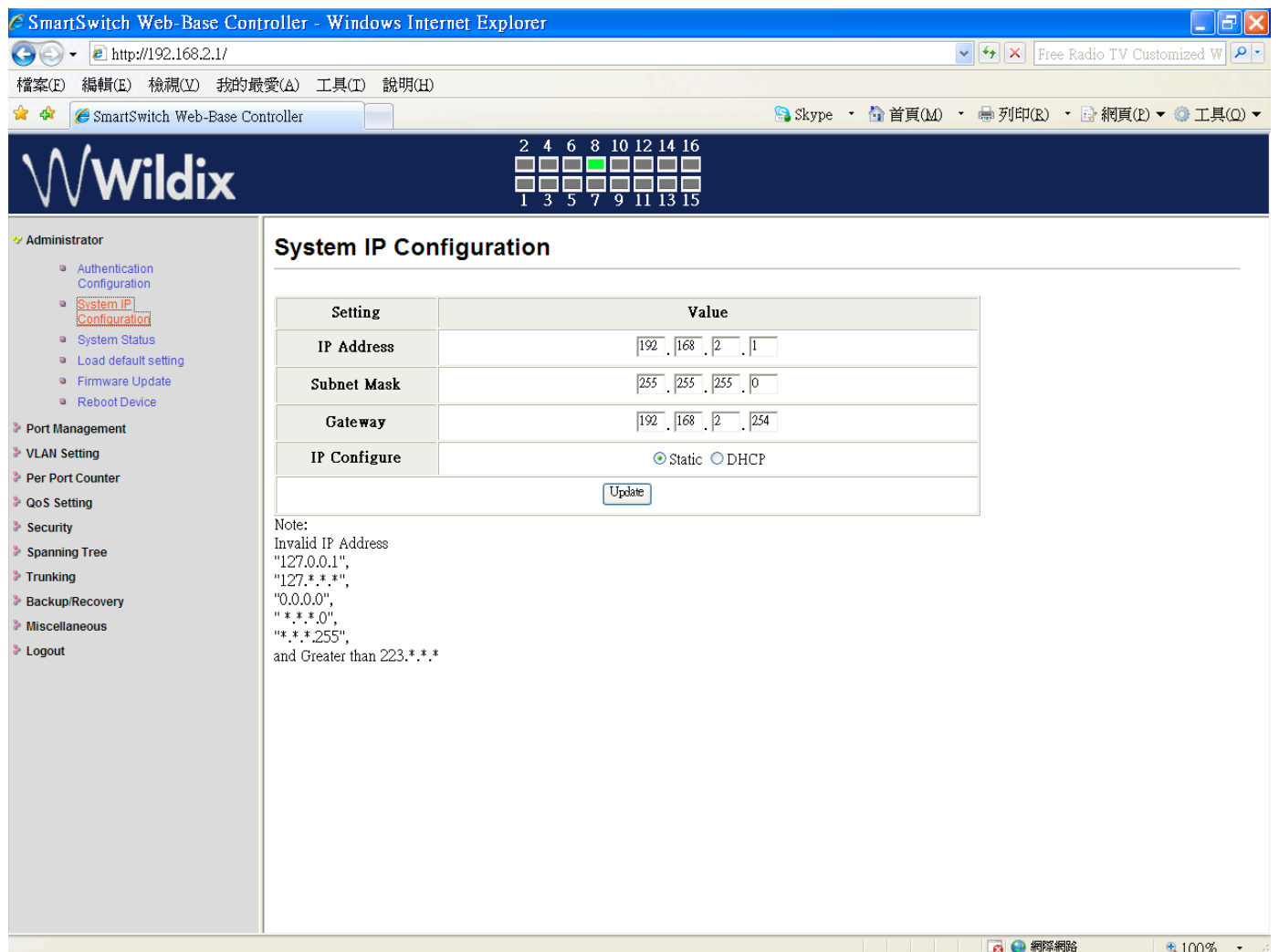
**Note:**  
Username & Password can only use "a-z","A-Z","0-9","\_","+","-","=".

1. Change the user name and the password.

2. Click on "Update" to confirm the change.

You can use the new user name and password.

## Administrator: System IP Configuration



The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The main content area is titled "System IP Configuration" and contains a table with the following settings:

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

Below the table is an "Update" button. A note section below the table contains the following text:

Note:  
Invalid IP Address  
"127.0.0.1",  
"127.\*.\*.\*",  
"0.0.0.0",  
"\*.\*.\*.0",  
"\*.\*.\*.255",  
and Greater than 223.\*.\*.\*

1. Change the IP address: type the new IP address or select DHCP IP configuration.
2. Click on "Update" to confirm the change.  
"Setting Process OK!!" is shown on the screen.
3. Click on "Reboot" to use new setting

The setting of "System IP Configuration" is finished.

## Administrator: System Status

The screenshot shows the Wildix Web-Base Controller interface in Internet Explorer. The browser title is "SmartSwitch Web-Base Controller - Windows Internet Explorer" and the address bar shows "http://192.168.2.1/". The Wildix logo is visible in the top left. A navigation menu on the left includes "Administrator" (with sub-items: 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", and "Logout". The main content area is titled "System Status" and contains a table with the following data:

MAC Address	00:03:ce:01:1a:09
Number of Ports	16
System Version	V100817
Idle Time Security	Idle Time: 0 (1~30 Minutes) <input type="checkbox"/> Idle Time Security <input type="radio"/> Auto Logout(Default). <input type="radio"/> Back to the last display.

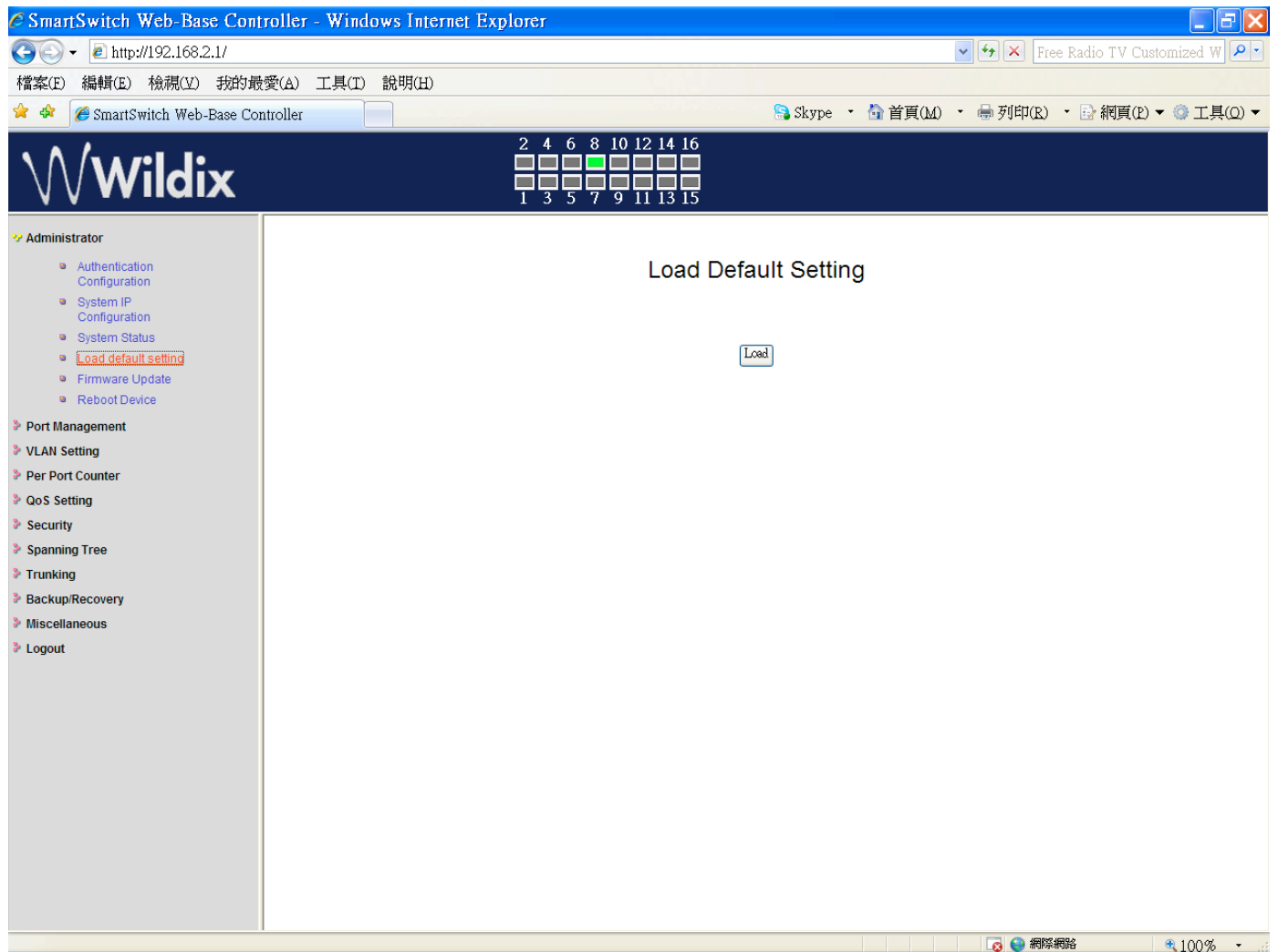
An "Update" button is located at the bottom of the form.

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 change.

The setting of "System Status" is finished.

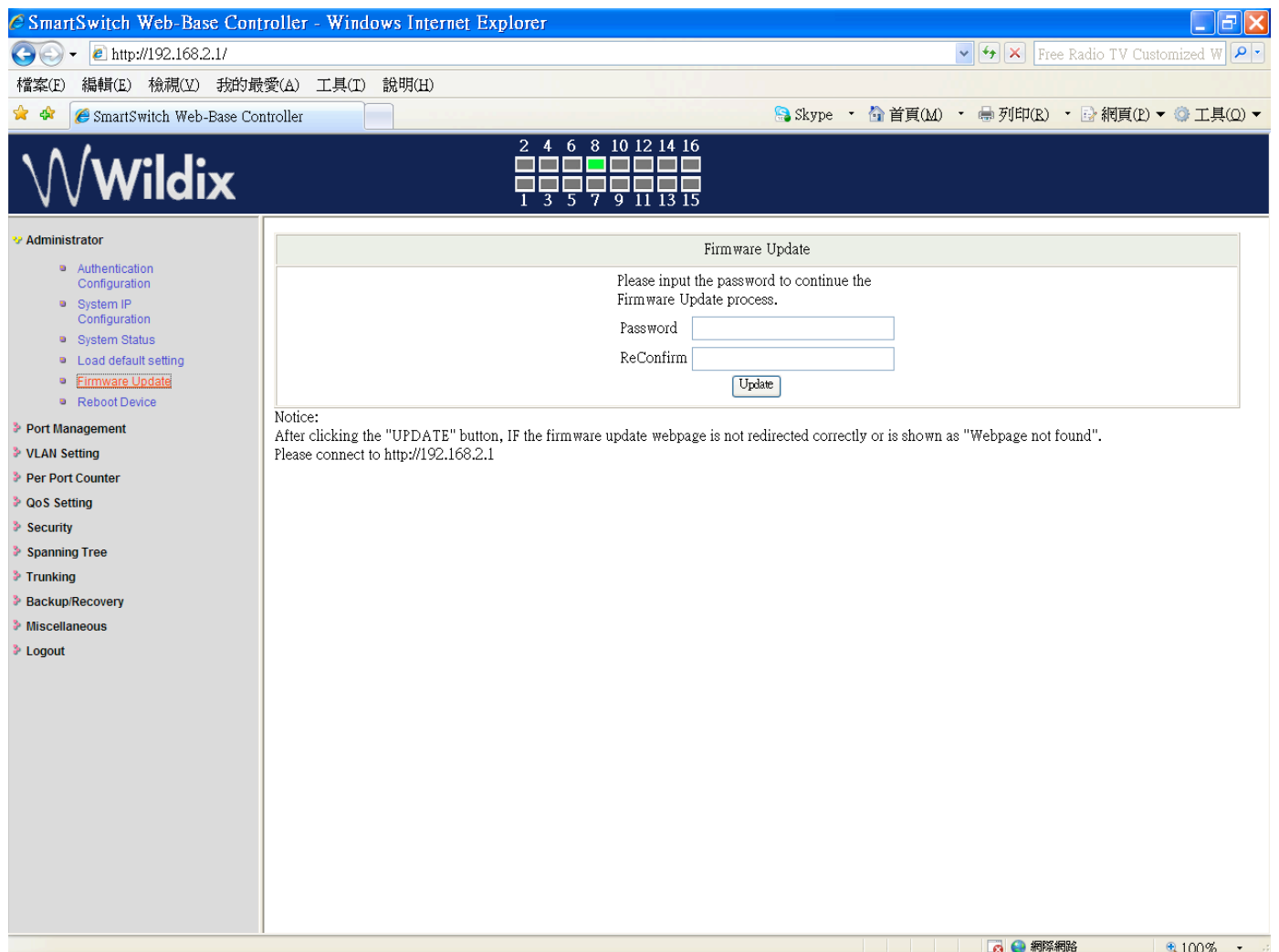
## Administrator: Load Default Setting



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.



## 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 Wildix logo is visible at the top left. A navigation menu on the left includes "Administrator" (with sub-items like Authentication Configuration, System IP Configuration, System Status, Load default setting, Firmware Update, and Reboot Device), "Port Management", "VLAN Setting", "Per Port Counter", "QoS Setting", "Security", "Spanning Tree", "Trunking", "Backup/Recovery", "Miscellaneous", 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.

Password

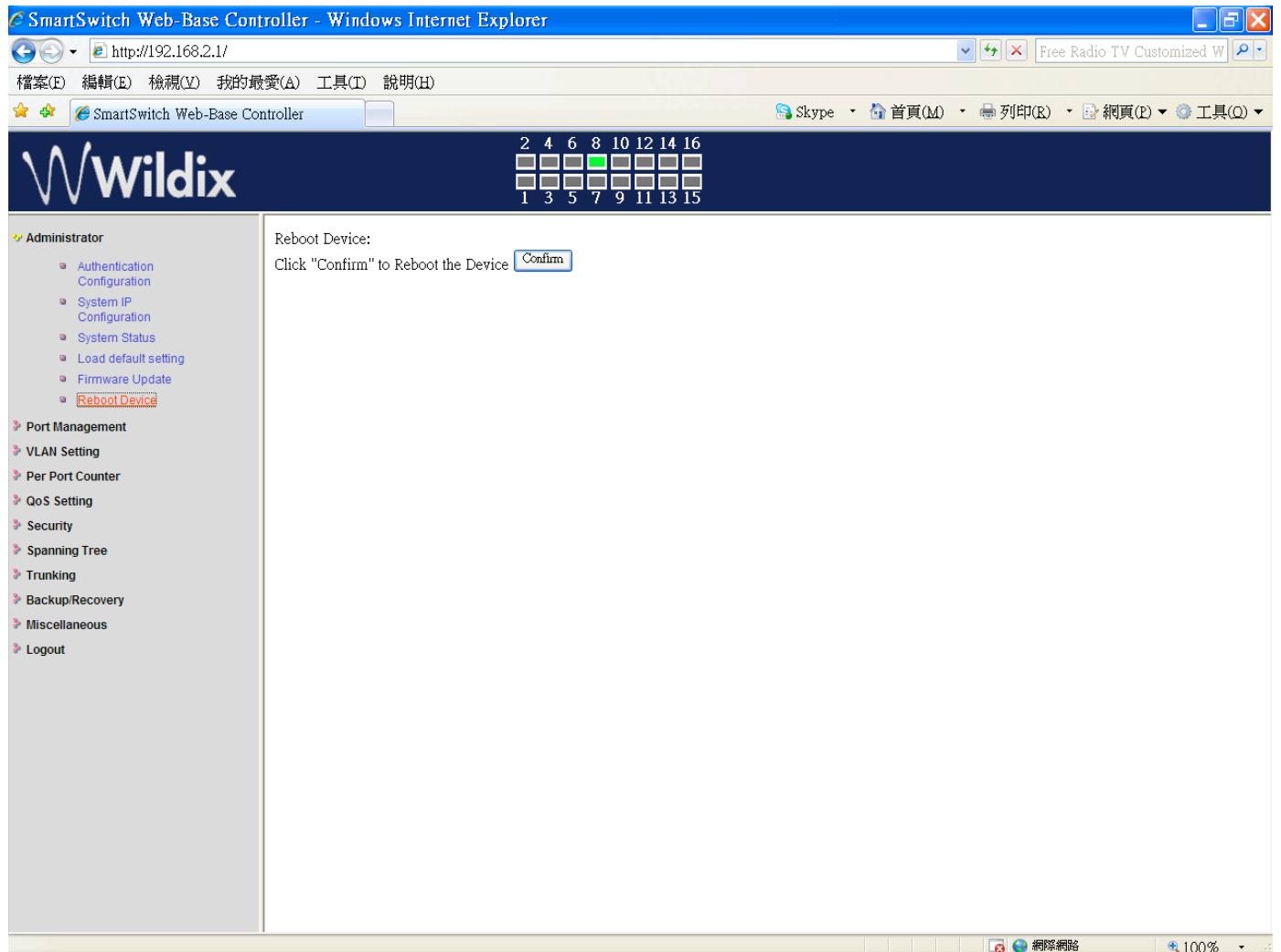
ReConfirm

Notice:  
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>

Follow the instruction on the screen to update the 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 top navigation bar includes the Wildix logo and a grid of status indicators. The left sidebar contains a navigation menu with options like Administrator, Port Management, VLAN Setting, etc. The main content area is titled "Port Configuration" and features several dropdown menus for "Function" (Auto, Speed, Duplex, Pause, Backpressure, Tx Capability, Addr. Learning) and a "Select Port No." section with checkboxes for ports 01 through 16. Below this is an "Update" button. A table displays the "Current Status" and "Setting Status" for ports 1 through 11. Port 8 is highlighted with a green dot in the "Link" column.

Port	Current Status				Setting Status						
	Link	Speed	Duplex	FlowCtrl	Auto-Nego	Speed	Duplex	Pause	Backpressure	Tx Cap	Addr. Learning
1	---	---	---	---	Auto	100M	Full	On	On	On	On
2	---	---	---	---	Auto	100M	Full	On	On	On	On
3	---	---	---	---	Auto	100M	Full	On	On	On	On
4	---	---	---	---	Auto	100M	Full	On	On	On	On
5	---	---	---	---	Auto	100M	Full	On	On	On	On
6	---	---	---	---	Auto	100M	Full	On	On	On	On
7	---	---	---	---	Auto	100M	Full	On	On	On	On
8	●	100M	Full	On	Auto	100M	Full	On	On	On	On
9	---	---	---	---	Auto	100M	Full	On	On	On	On
10	---	---	---	---	Auto	100M	Full	On	On	On	On
11	---	---	---	---	Auto	100M	Full	On	On	On	On

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 (Capability)" - enable/disable for the selected port.
7. "Addr. Learning" - enable/disable for the selected port.

The setting of "Port Configuration" is finished.

## Port Management: Port Mirroring

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The main content area is titled "Port Mirroring". It features a grid for selecting destination and source ports. The "Dest Port" section has a grid of 16 checkboxes, with port 8 selected. The "Source Port" section has a grid of 16 checkboxes, with port 1 selected. Below the grids is a "Monitored Packets" dropdown menu set to "Disable". An "Update" button is located below the "Monitored Packets" dropdown. The interface also includes a navigation menu on the left with options like "Administrator", "Port Management", "VLAN Setting", etc.

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 select port 1 to port 16
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

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The main content area is titled "Bandwidth Control". It features a configuration form with the following fields:

- Port No.:** A dropdown menu currently showing "01".
- Tx Rate Value:** A text input field with the label "Bandwidth = [ ] X resolution. (0~19/195/255)" and a note "0: Full speed. 1~19/195/255: Specified bandwidth.".
- Rx Rate Value:** A text input field with the label "Bandwidth = [ ] X resolution. (0~19/195/255)" and a note "0: Full speed. 1~19/195/255: Specified bandwidth.".
- Resolution:** A dropdown menu currently showing "Low". Below it, the text reads: "Low:32Kbps (1).Rate value: 1~255. High:512Kbps (1).When link speed is 10M and the resolution is 512Kbps, the Rate value should be 1~19. (2).When link speed is 100M and the resolution is 512Kbps, the Rate value should be 1~195. All ports use the same bandwidth resolution." Below the dropdown are "Update" and "LoadDefault" buttons.

Below the configuration form, there is a note: "If the link speed of selected port is lower than the rate that you setting, this system will use the value of link speed as your setting rate." At the bottom of the page is a table showing port status:

Port No	Tx Rate(Kbps)	Rx Rate(Kbps)	Link Speed	Port No	Tx Rate(Kbps)	Rx Rate(Kbps)	Link Speed
1	Full Speed	Full Speed	---	9	Full Speed	Full Speed	---
2	Full Speed	Full Speed	---	10	Full Speed	Full Speed	---
3	Full Speed	Full Speed	---	11	Full Speed	Full Speed	---
4	Full Speed	Full Speed	---	12	Full Speed	Full Speed	---
5	Full Speed	Full Speed	---	13	Full Speed	Full Speed	---
6	Full Speed	Full Speed	---	14	Full Speed	Full Speed	---
7	Full Speed	Full Speed	---	15	Full Speed	Full Speed	---
8	Full Speed	Full Speed	100M	16	Full Speed	Full Speed	---

1. Select the "Port No.": port 1 to port 16
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 "LoadDefault".

The setting of "Bandwidth Control" is finished.

## Port Management: Broadcast Storm Control

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. 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 16 columns representing ports (1-16) and two rows for "Enable Port" configuration. Each cell in the "Enable Port" rows contains a checkbox. An "Update" button is located below the table. A note at the bottom of the configuration area states: "This value indicates the number of broadcast packet which is allowed to enter each port in one time unit. One time unit is 500 us for 100Mbps speed and 5000us for 10Mbps speed".

Threshold	63 1~63															
Enable Port	1	2	3	4	5	6	7	8								
	<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"/>							
	9	10	11	12	13	14	15	16								
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								

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

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The main content area is titled "POE Configuration" and displays a table for configuring 16 ports. The table is organized into two groups of 8 ports each. The first group (ports 01-08) and the second group (ports 09-16) both have their "Enable" checkboxes checked. The "PSE Current" and "Minimum Output Power" fields are set to "No Load" and "---" respectively for all ports. The "POE Class" field is set to "---" for all ports. Below the table is an "Update" button and a legend for the "Update:" function.

Port	01	02	03	04	05	06	07	08
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	---	---	---	---	---	---	---	---

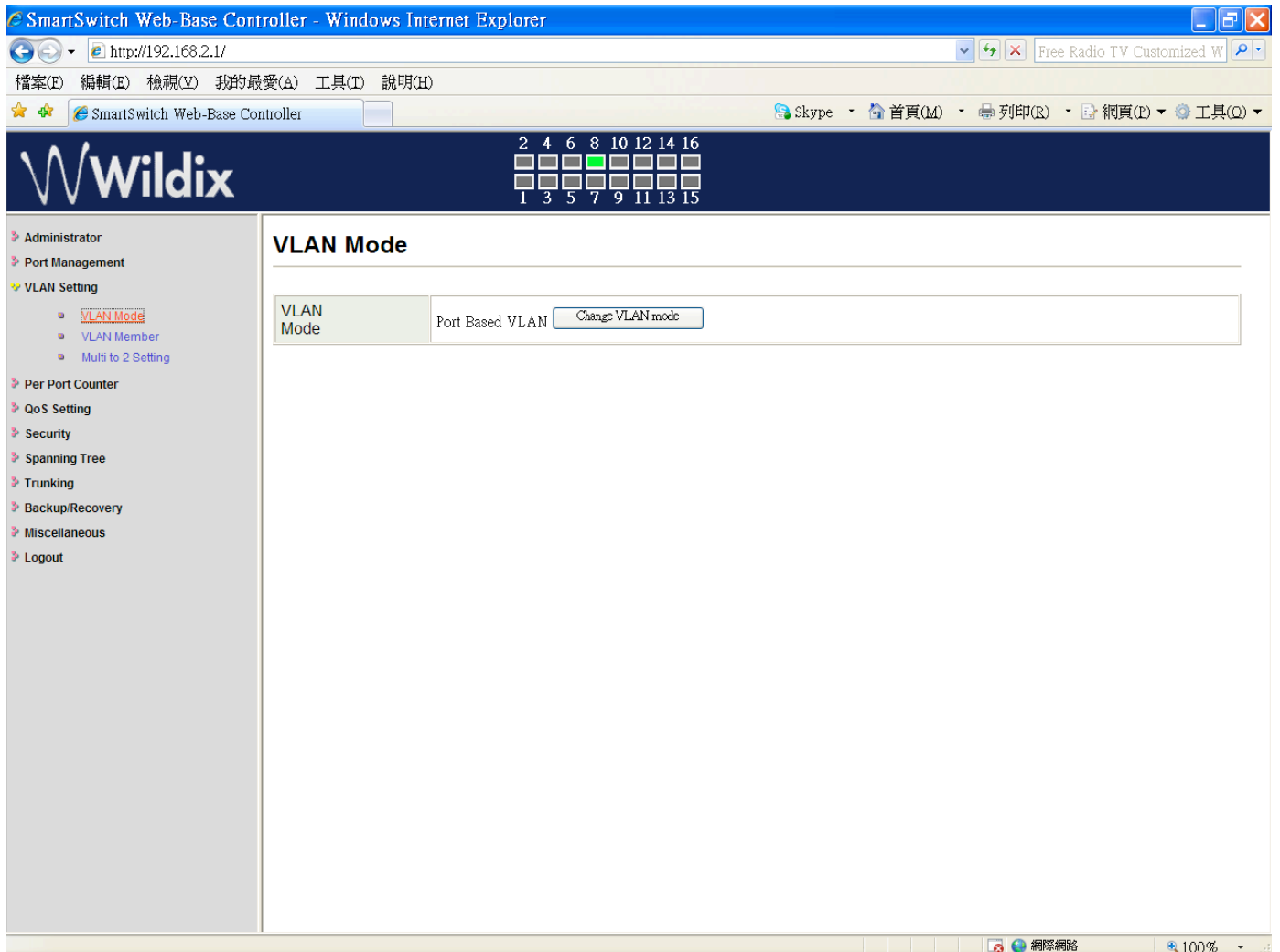
**Update:** Update the power control funtion.  
**Enable**:Power On  
**Enable**:Power Off

Remote access and monitor the attached PD (Powered Device) status by using Enable/Disable function. \*\* 16-port shares 123.2W

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 on "Update" to confirm and finish the setting.

The setting of "PoE Configuration" is finished.

## 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 2 setting and tag Based VLAN are 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 main configuration area is titled "VLAN Member Setting (Port Based)". It features a table for selecting ports for a specific VLAN. The table has columns for ports 01 through 08 and rows for "Dest PORT" and "Member Selection". The "Member Selection" row shows checkboxes for ports 01 through 08, all of which are checked. Below the table are "Update" and "LoadDefault" buttons. At the bottom of the page, there is a "VLAN MEMBER" table with columns for ports 1 through 16 and rows for ports 1 through 10. Each cell in this table contains a checkmark, indicating that all ports are members of the selected VLAN.

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.

The setting of "VLAN Mode" is finished.

## VLAN Setting: Multi to 2 Setting

**Multi to 2 Setting**

Destination PortNo: \_\_\_\_\_ Home VLAN 1: 01

Home VLAN 2: 01

Current Setting: Port:- & -

Disable Port	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	<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"/>

1. A example for Multi-to-2 structure

**VLAN Configuration**

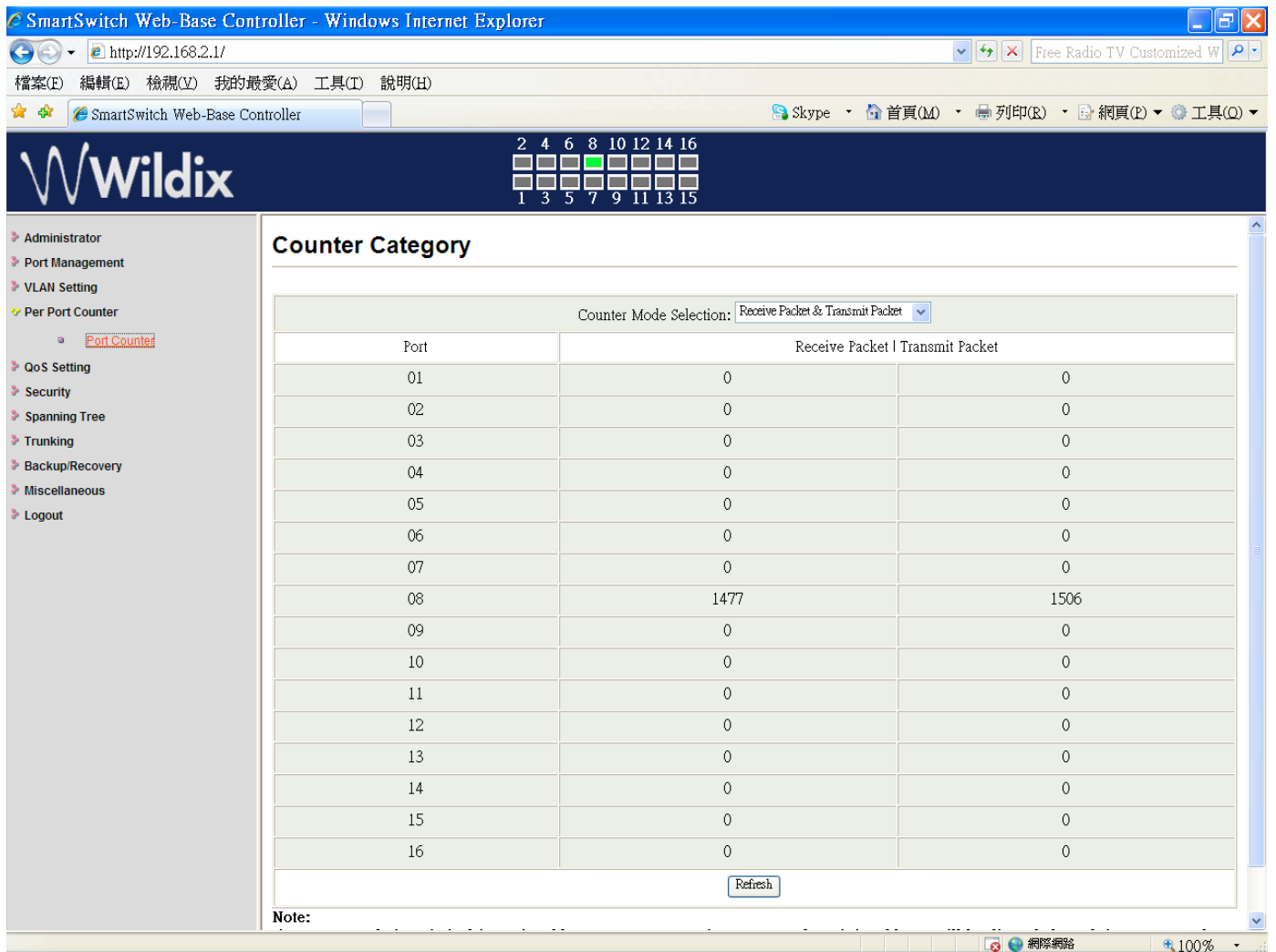
2. The original setting of the VLAN Group will be cleared and replaced by this special structure if you enable this function. On the other hand, if you set the VLAN Group again, this special structure will be cleared and replaced by your newest setting.

This is a special design for setting the switch VLAN into “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" and features a "Counter Mode Selection" dropdown menu set to "Receive Packet & Transmit Packet". Below this is a table with the following data:

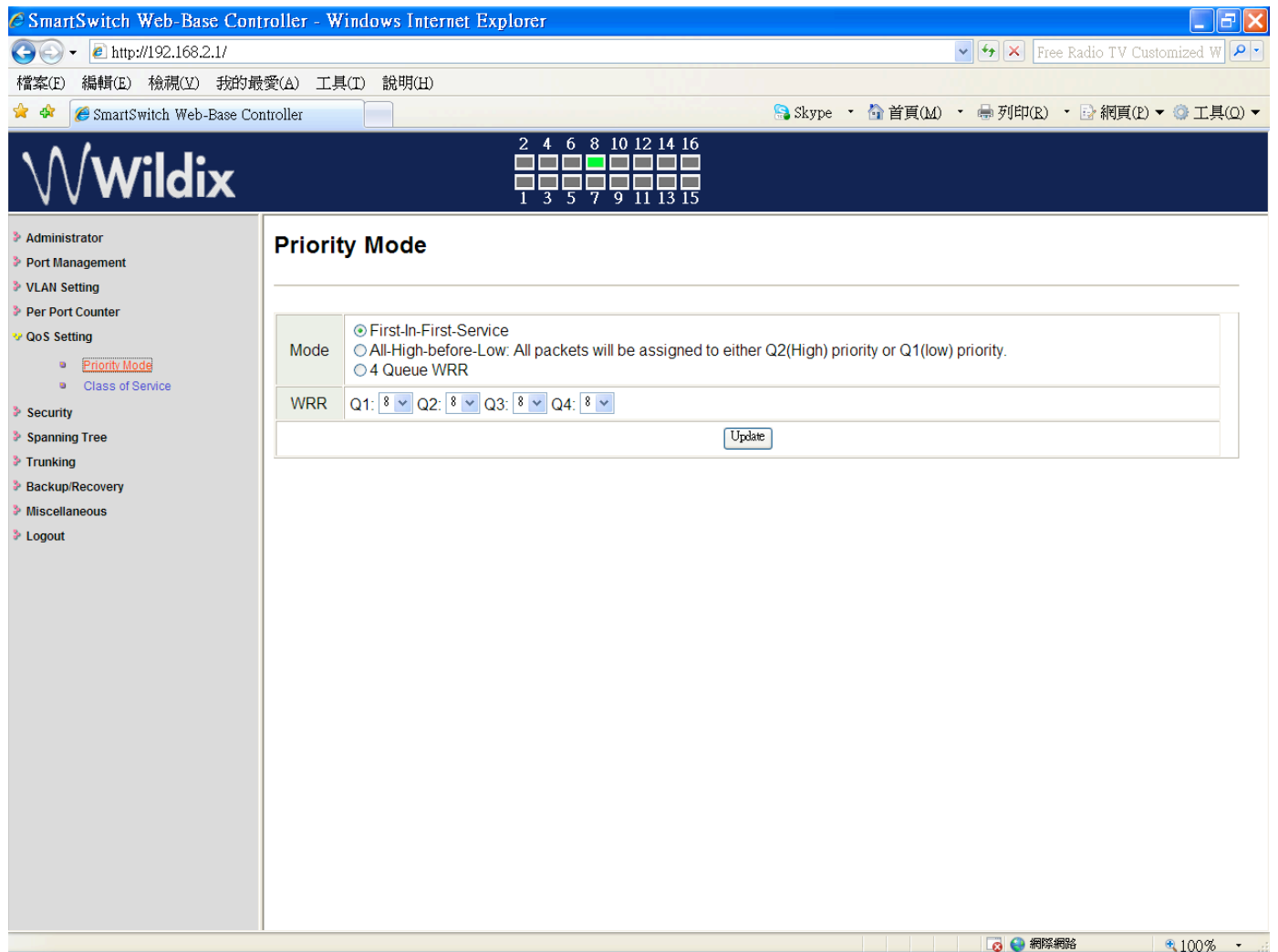
Port	Receive Packet	Transmit Packet
01	0	0
02	0	0
03	0	0
04	0	0
05	0	0
06	0	0
07	0	0
08	1477	1506
09	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0

A "Refresh" button is located below the table. A "Note:" section is visible at the bottom of the page.

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 high priority queue or low priority queue.
3. "4 Queue WRR (Weight-Round-Robin)" - set the ratio of the transmitting packet.
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

Wildix

2 4 6 8 10 12 14 16  
1 3 5 7 9 11 13 15

Administrator  
Port Management  
VLAN Setting  
Per Port Counter  
QoS Setting  
Priority Mode  
Class of Service

### Class of Service

The switch treats TCP/UDP, IP TOS/DS, 802.1p and physical port CoS scheme in the following priority.  
TCP/UDP > IP TOS/DS > 802.1p > Physical port.  
This means TCP/UDP CoS will override all other settings.

(1) TCP/UDP port

Protocol	Note:	QI
FTP	(1) Q1 ~ Q4 options are effective for the selected physical port only. (2) "Drop" option is the global setting for all physical ports.	Q1
SSH		Q1
TELNET		Q1
SMTP		Q1
DNS		Q1
TFTP		Q1
HTTP		Q1
POP3		Q1
NEWS		Q1
SNTP		Q1
NetBIOS		Q1
IMAP		Q1
SNMP		Q1
HTTPS		Q1

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  
1 3 5 7 9 11 13 15

Administrator  
Port Management  
VLAN Setting  
Per Port Counter  
QoS Setting  
Priority Mode  
Class of Service

### (2) IP TOS/DS

IP TOS/DS Priority Setting: 6'b001010: Q1, 6'b010010: Q1, 6'b011010: Q1, 6'b100010: Q1, 6'b101110: Q1, 6'b110000: Q1, Other Values: Q1

IP TOS/DS Port Setting:

<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"/>

Update

### (3) 802.1p

For 802.1p priority field, the switch utilizes the following priority mapping table.

6 and 7 are mapped to the "Q4" priority queue.  
4 and 5 are mapped to the "Q3" priority queue.  
0 and 3 are mapped to the "Q2" priority queue.  
1 and 2 are mapped to the "Q1" priority queue.

Port No/Mode	802.1p	Port No/Mode	802.1p
1	<input type="checkbox"/>	9	<input type="checkbox"/>
2	<input type="checkbox"/>	10	<input type="checkbox"/>
3	<input type="checkbox"/>	11	<input type="checkbox"/>
4	<input type="checkbox"/>	12	<input type="checkbox"/>
5	<input type="checkbox"/>	13	<input type="checkbox"/>
6	<input type="checkbox"/>	14	<input type="checkbox"/>
7	<input type="checkbox"/>	15	<input type="checkbox"/>
8	<input type="checkbox"/>	16	<input type="checkbox"/>

Update

(4) Physical port

You can set QoS mode of port.

TCP/UDP > TP TPS/DS > 802.1P > Physical port

1. "TCP/UDP Port" – Q1 ~ Q4 options are 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 "4 Queue WRR" on **QoS Setting: Priority Mode.**

\*\*WRR –Q1/Q2/Q3/Q4

\*\*"Drop" - packets are dropped.

2. "IP TOS/DS" – "Priority Setting": Q1 ~ Q4; "IP TOS/DS Port Setting" - It means the packets with special IP are firstly transmitted.
3. "802.1p" – Priority mapping table as the screen shows.
4. "Physical port" - you can select the port you want to configure as Q1~Q4 priority.
5. Click on "Update" to confirm and finish the setting.

The setting of "Class of Service" is finished.

## Security: MAC Address Configuration

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The page title is "MAC Address Configuration". On the left, a navigation menu includes Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security (highlighted), Spanning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout. Under Security, "MAC Address Binding" is selected. The main content area shows a form for configuring MAC address binding for port 1. The form includes a "Port No." field with the value "1" and a "MAC Address" field with six input boxes for hexadecimal digits. Below the MAC address field is a "Read" button. Underneath the form are two dropdown menus: "Select Port" set to "01" and "Binding" set to "Disable", followed by an "Update" button. At the bottom, a table lists the filter status for all 16 ports.

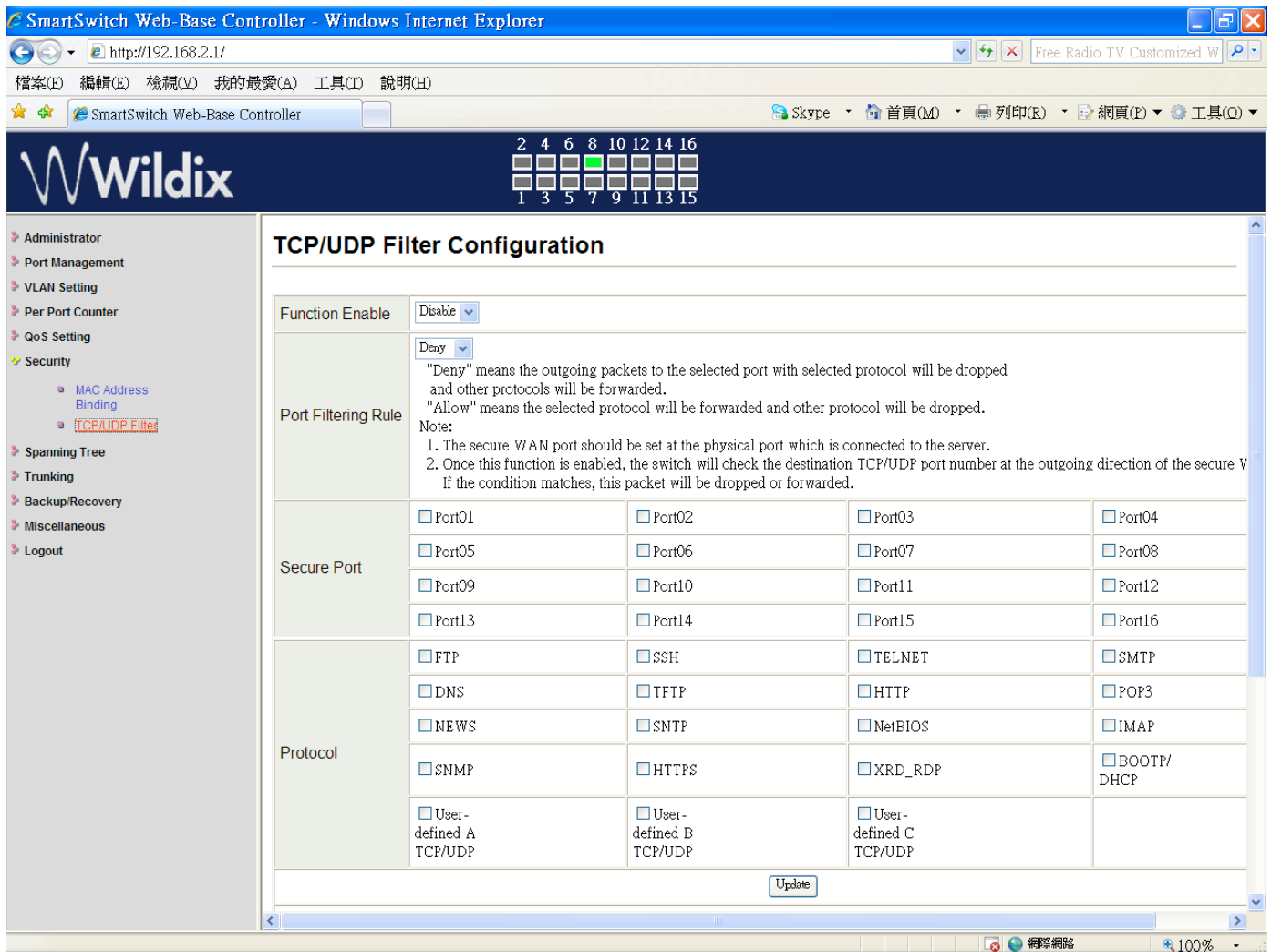
Port No.	Filter Status	Port No.	Filter Status
1	Disable	9	Disable
2	Disable	10	Disable
3	Disable	11	Disable
4	Disable	12	Disable
5	Disable	13	Disable
6	Disable	14	Disable
7	Disable	15	Disable
8	Disable	16	Disable

Set special MAC address to activate on the selected port

1. "Select Port" – port 1~16
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



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:

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 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 in 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. The main content area displays the "STP Bridge Settings" page. The page includes a navigation menu on the left with options like Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, Backup/Recovery, Miscellaneous, and Logout. The "Spanning Tree" menu is expanded, showing "STP Bridge Settings" and "STP Port Settings".

The "STP Bridge Settings" form contains the following fields:

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

Below the form, there is a note: *Note: 2\*(Forward Delay-1) >= Max Age, Max Age >= 2\*(Hello Time+1)*

Below the note, there is a table showing the current STP Bridge Status:

STP Bridge Status						
STP Mode	Bridge ID	Hello Time	Max Age	Forward Delay	Root ID	
RSTP	32768:00 03 CE 01 1A 09	2	20	15	I'm the root bridge!	

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 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 browser address bar shows <http://192.168.2.1/>. The Wildix logo is visible at the top left. A navigation menu on the left includes Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree (with sub-items STP Bridge Settings and STP Port Settings), Trunking, Backup/Recovery, Miscellaneous, and Logout. The main content area is titled "STP Port Settings" and contains two tables.

**STP Port Settings**

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

**STP Port Status**

Port No.	RPC	Priority	State	Status	Designated Bridge	Designated Port
1	Auto(200000)	0x80	--	Disable	--	--
2	Auto(200000)	0x80	--	Disable	--	--
3	Auto(200000)	0x80	--	Disable	--	--
4	Auto(200000)	0x80	--	Disable	--	--
5	Auto(200000)	0x80	--	Disable	--	--
6	Auto(200000)	0x80	--	Disable	--	--
7	1	0x80	--	Disable	--	--
8	15	0x80	Designated Port	Forwarding	--	--
9	10	0x00	--	Disable	--	--
10	2	0x00	--	Disable	--	--
11	Auto(200000)	0x00	--	Disable	--	--
12	Auto(200000)	0x00	--	Disable	--	--
13	Auto(200000)	0x00	--	Disable	--	--
14	Auto(200000)	0x00	--	Disable	--	--
15	Auto(200000)	0x00	--	Disable	--	--

1. Select "Port No.": Port 1 ~ Port 16

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.

## Trunking: Link Aggregation Settings

The screenshot shows the Wildix SmartSwitch Web-Base Controller interface. The main content area is titled "Trunking" and contains the following elements:

- System Priority:** A text input field with the value "0" and a range indicator "(1~65535)".
- Link Aggregation Algorithm:** A dropdown menu set to "MAC Source".
- Submit:** A button to save the settings.
- Notice:** A text box stating: "Notice: If any trunk group is set to LACP type, each port in the trunk group will not be enabled(can't Forward/Receive) until the port can finish LACP procedure with its link partner port."
- Refresh:** A button to refresh the page.
- Link Group Configuration Table:**

Member	Link Group 1				Link Group 2			
	P1	P2	P3	P4	P5	P6	P7	P8
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	--	--	--	--	--	--	--	--
<b>State</b>	Disable				Disable			
<b>Type</b>	Static				Static			
<b>Operation Key</b>	(1~65535)				(1~65535)			
<b>Time Out</b>	Long Time Out				Long Time Out			
<b>Activity</b>	Passive				Passive			
	<input type="submit" value="Submit"/>							

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

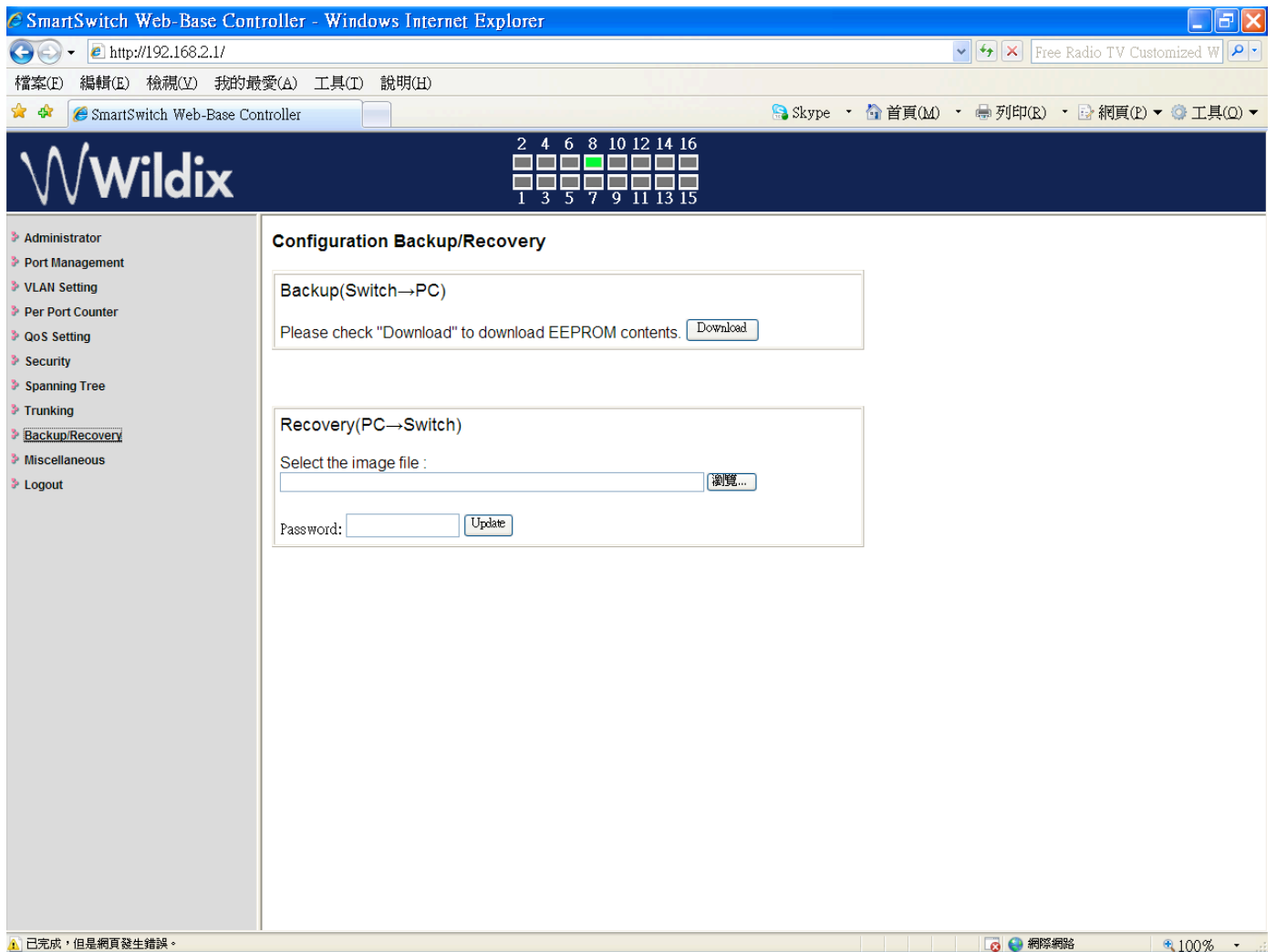
Click on "Submit" to confirm and finish the setting.

"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"**

## 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 “Update” to confirm the setting.

## Miscellaneous: Miscellaneous Setting

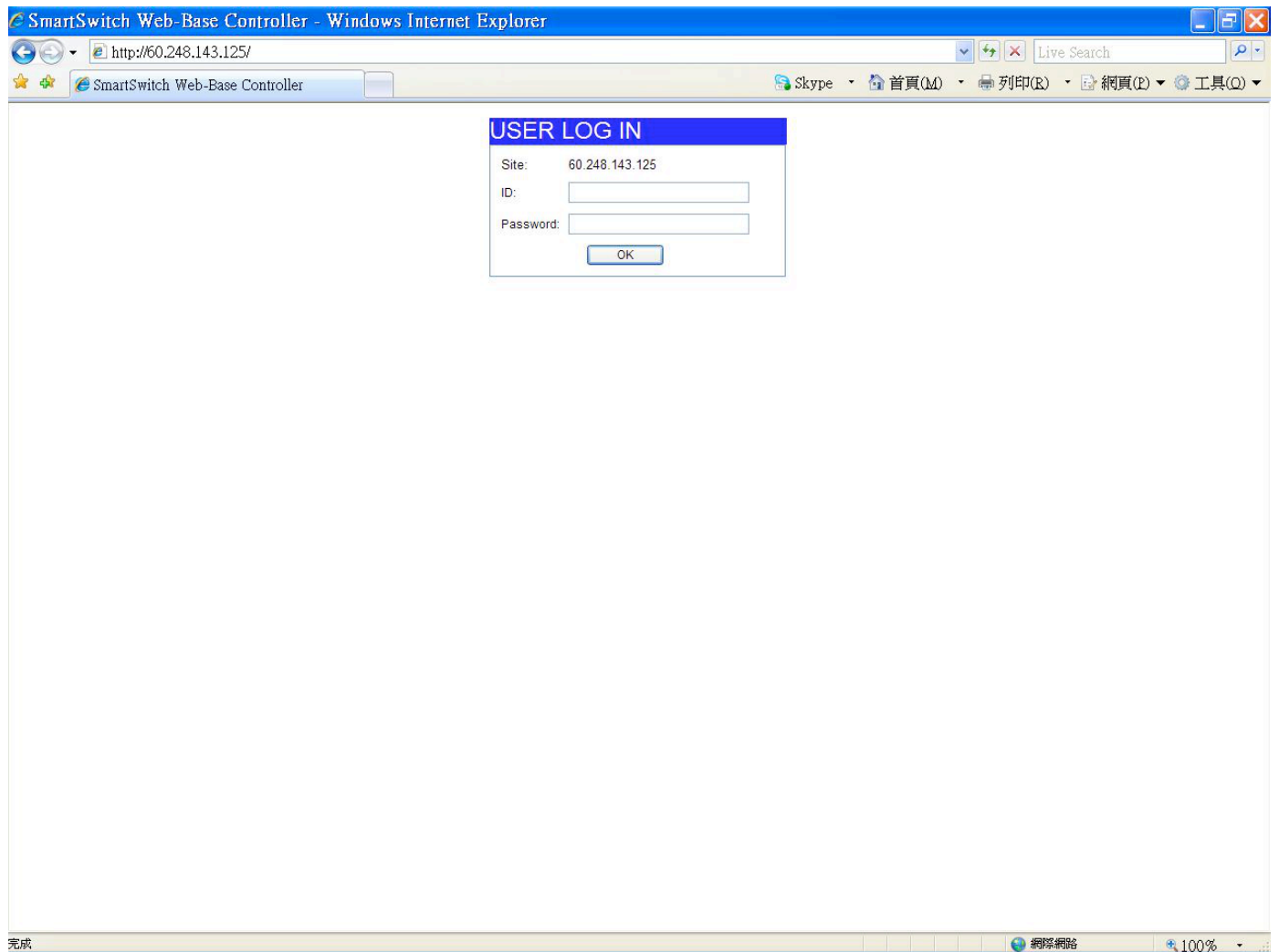
The screenshot shows the Wildix SmartSwitch Web-Base Controller interface in a Windows Internet Explorer browser. The browser address bar shows <http://192.168.2.1/>. The Wildix logo is visible in the top left corner. A navigation menu on the left includes: Administrator, Port Management, VLAN Setting, Per Port Counter, QoS Setting, Security, Spanning Tree, Trunking, Backup/Recovery, **Miscellaneous**, and Logout. The main content area is titled "Miscellaneous Setting" and contains three sections:

- Output Queue Aging Time**: A dropdown menu for "Aging time" is set to "Disable" ms. The description states: "The output queue aging function allows the administrator to select the aging time of a packet stored in the output queue. A packet stored in the output queue 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 dropdown menu for "VLAN Striding" is set to "Disable". The description states: "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 dropdown menu for "IGMP Snooping" is set to "Disable". The description states: "IGMP Snooping V1 & V2 function enable".

An "Update" button is located at the bottom right of the settings area.

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.

**Logout:** You can click "Logout" to logout.



## Contacts



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