Managed Switch User Guide

For 8 and 24-port Razberi ServerSwitches

August 30, 2013

Purpose

This guide provides the configuration instructions for the Razberi Managed Switch, including Port Management, VLAN setting, Per Port Counters, QoS setting, Security, Spanning Tree, Trunking, DHCP Relay Agent, Backup/Recovery, Miscellaneous, SNMP Settings, and Logout.

The Razberi Managed Switch supports all mainstream browsers, such as IE 6.0~9.0, Firefox 2.0~3.0 and Chrome, to configure Switch functions listed below.

Prepare to enter the managed switch

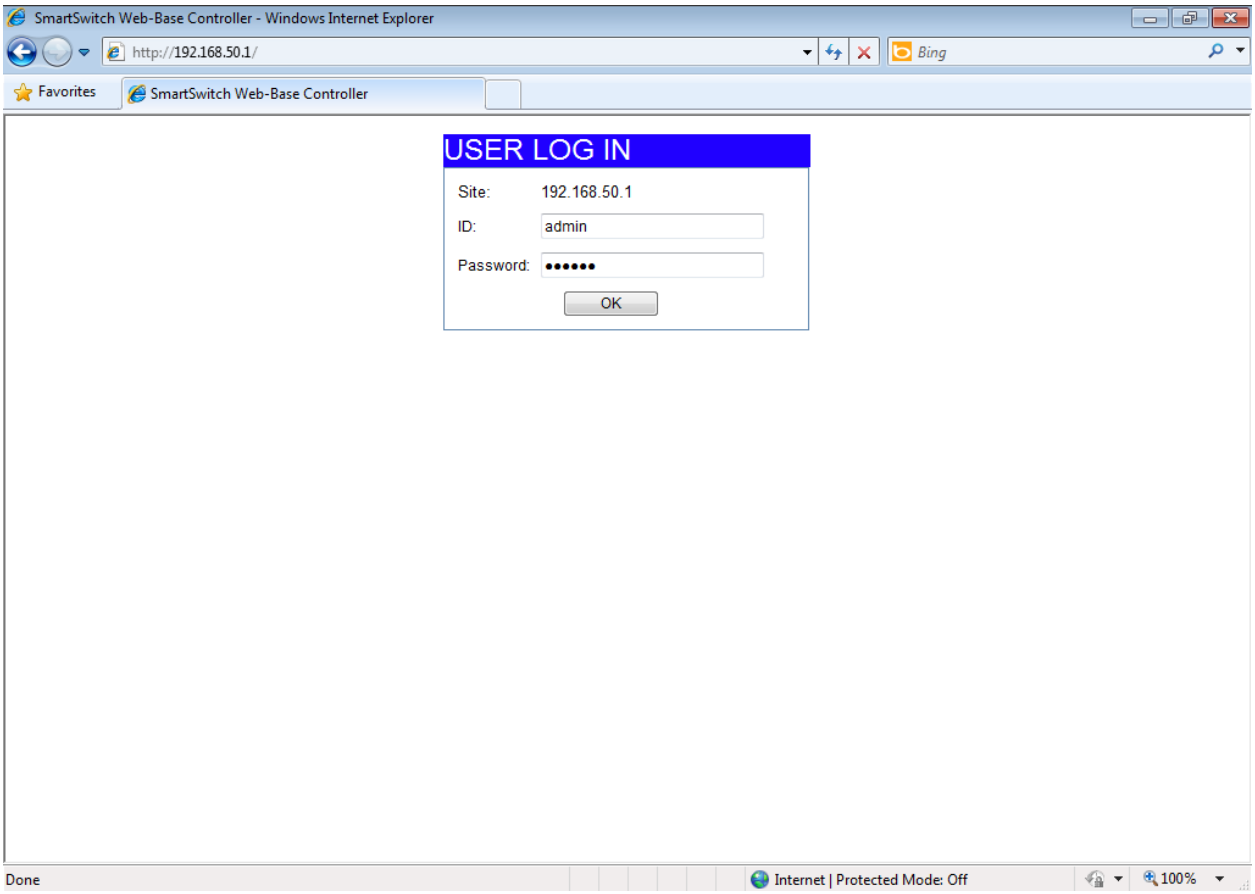
Enter the correct administrator name and password after the login page shows up.

Default IP address: 192.168.2.1

Default administrator name: admin

Default password: system

Press “OK” to login.



Tip: The administrator name and password fields are **case-sensitive**. For example: “**ADMIN**” will not be recognized as “**admin**”.

If you input the **incorrect administrator name or password**, the following warning message will show up and **you must click "OK" to go back** to the login page.

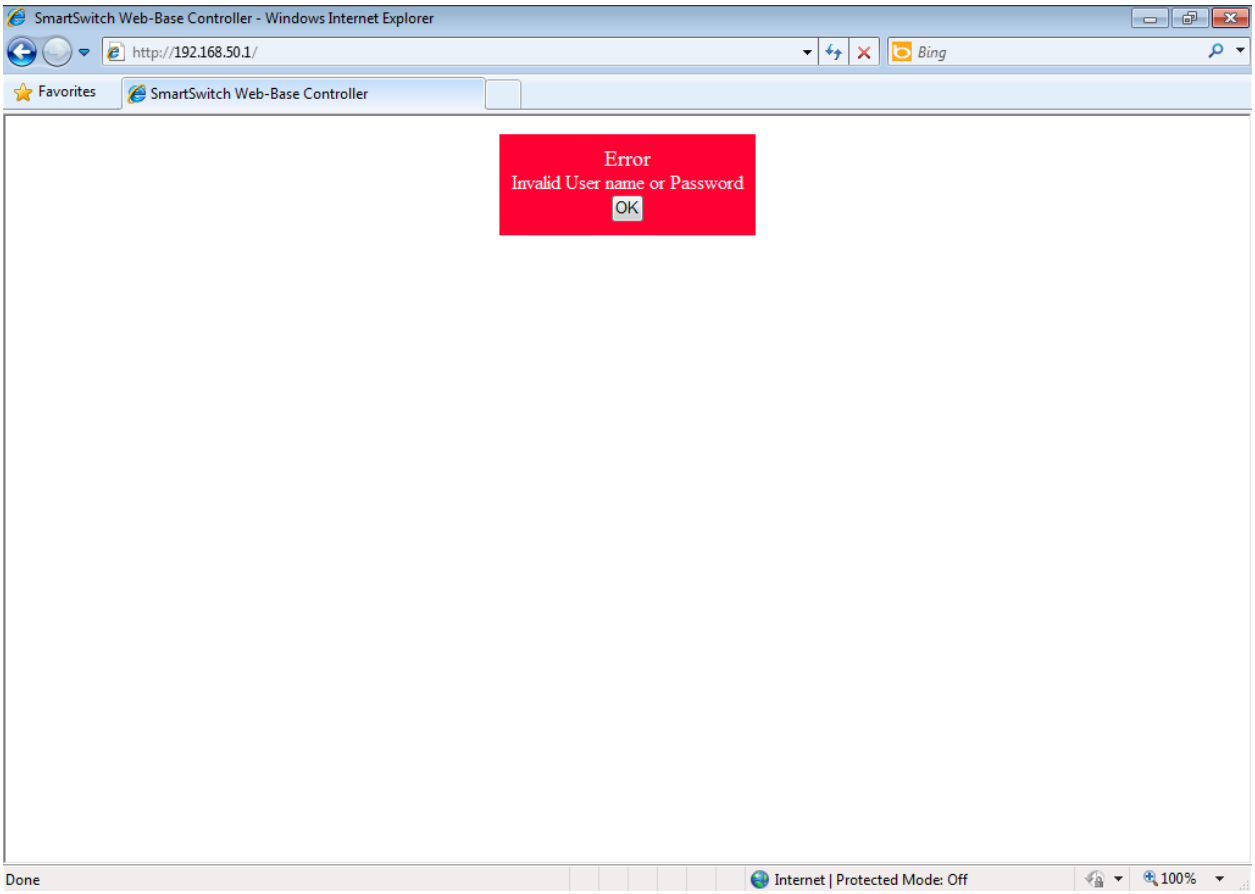


Table of Contents

Administrator

Authentication Configuration

This page allows the administrator to **change the administrator name and the password**. You can input up to 15 characters for each field.

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

Tip: The legal characters for these fields are "**a-z**," "**A-Z**," "**0-9**," "**_**," "**+**," "**-**," and "**=**."

System IP Configuration

This page shows **system configuration** including the current IP address and sub-net mask and Gateway. IP address, Subnet Mask, and Gateway at system IP Configuration can be configured by the administrator. The managed switch also **supports DHCP** to allow the dynamic IP address allocated by a network DHCP server.

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

System Status

This page allows the administrator to **check the general switch status**, including Switch MAC address and software version.

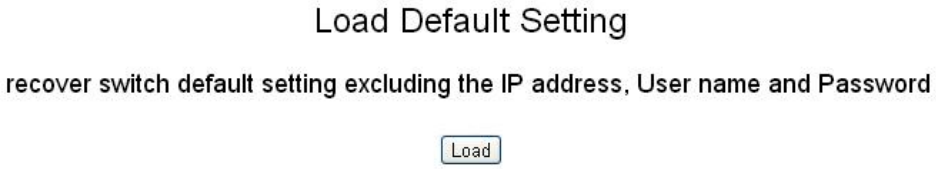
MAC Address	10:f0:13:f0:18:26
Number of Ports	24+2
Comment	switch MAX:15
System Version	IP1826D_WebCtrl_IP210L3.95_v105
☐ Idle Time Security	Idle Time: 0 (1~30 Minutes) Auto Logout(Default). Back to the last display.
	Update

Tip: The legal characters for these fields are "**a-z**," "**A-Z**," "**0-9**," "**_**," "**+**," "**-**," and "**=**."

The comment field allows the network administrator to **input an easy-to-remember nickname for this switch**.
The Idle time field **allows the administrator to set a timer for auto logout**. When the system detects no web page activity for a pre-defined time, the system will auto-logout.

Load default setting

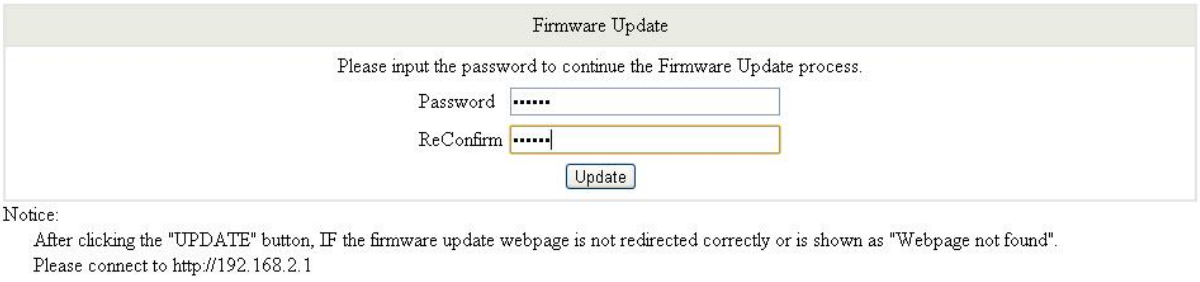
Clicking the "Load" button will **make the switch go back to the original configuration**.
After Load Default is executed, all settings will be restored to the default setting.



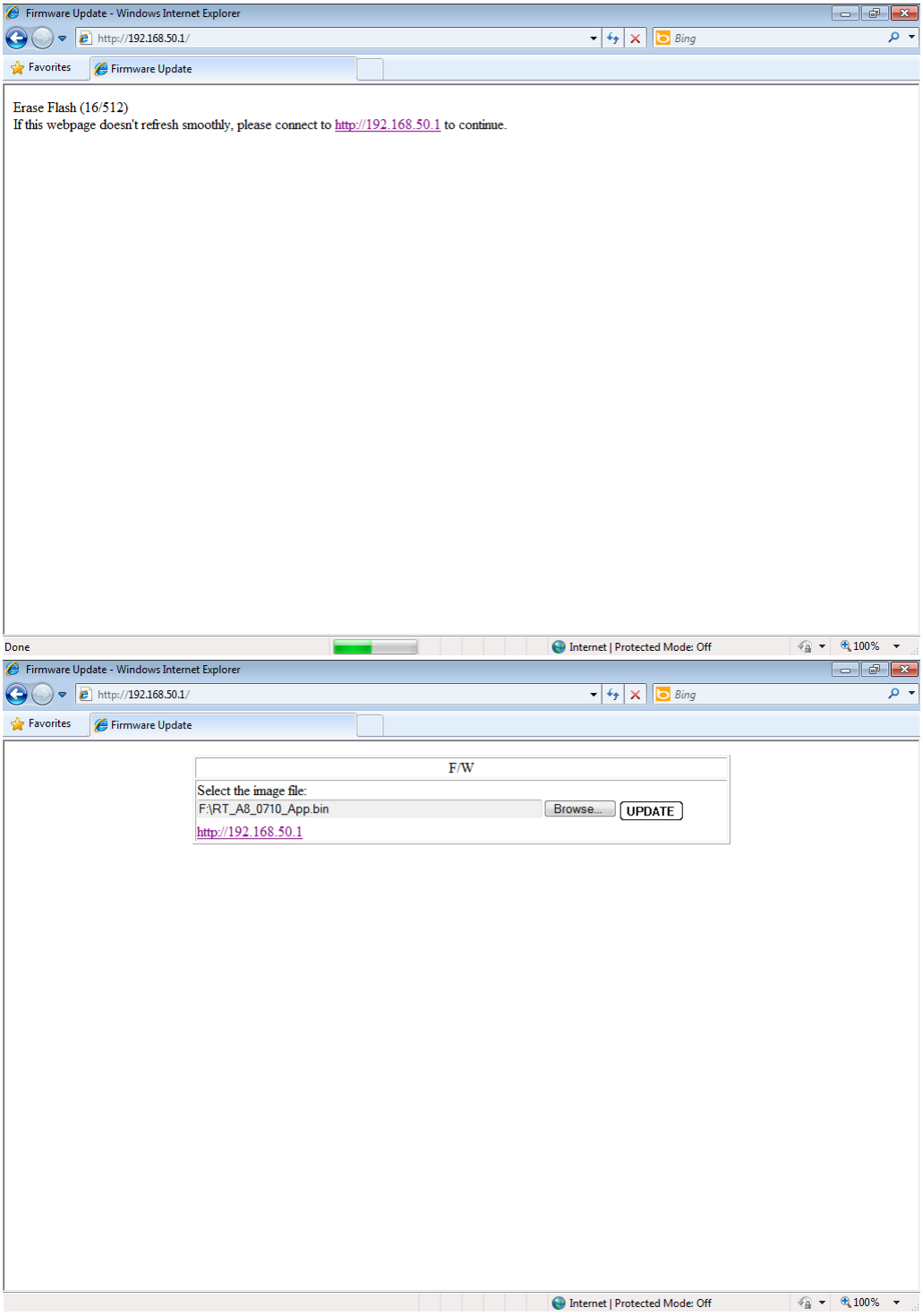
Tip: This change only concerns the switch behavior, excluding the change for IP address, Username, and password. To reset all settings, see the **Load Default Settings – Hardware** section.

Firmware Update

Before the firmware update procedure is executed, you must **enter the login password twice and press the "Update" button**. There is a self-protection mechanism in the BootLoader, so the BootLoader will keep intact. Even if the power is turned off or the cable link fails during the firmware update procedure, the BootLoader will restore the code to firmware update page.



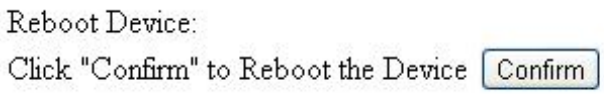
After you press “Update” button, the current firmware will be erased. Once erased, **select the new image file and press the “Update” button** in order for changes to take effect.



Note: The update process can take anywhere from 3 – 5 minutes to complete.

Reboot Device

This page is used to **reboot the device**. **No hardware reset is executed** by means of executing "Reboot Device".

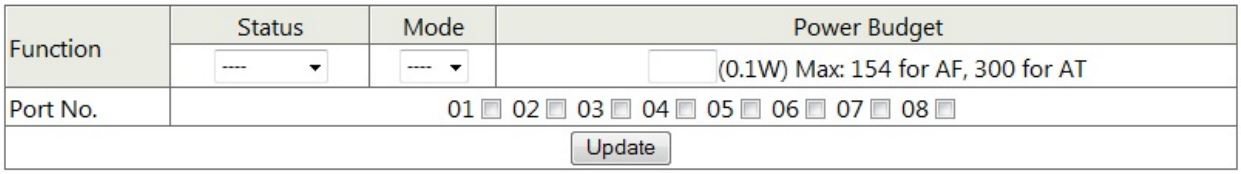


PoE

PoE Status

Field	Description
Max Available Power	Enter a value to update the total power budget of the POE switch. If user plug in a PD to switch that makes POE switch power consumption over this value, then the PD will no longer get powered.
System operation status	Status of system.
Main Power consumption	Current power consumption on POE switch.

PoE Setting



In PoE Setting, users can **change each port status, PoE mode, and Power Budget**.

Field	Description
Status	Port enable or disable
Mode	PoE mode can be set as AF/AT mode. AF mode : 15 W AT mode : 30 W
Power Budget	If PD consumes power above the Power Budget value, the PoE port will be shut down automatically and switch will repeat to power up PD if the port power consumption still over Power Budget.

For example, if ports 1 and 2 are to have a power budget of 16 watts, while all other ports have a budget of 31 W, the user may set the configuration as:

Function	Status	Mode	Power Budget
	Enable	AF	16 (0.1W) Max: 154 for AF, 300 for AT
Port No.	01 ☑ 02 ☑ 03 ☐ 04 ☐ 05 ☐ 06 ☐ 07 ☐ 08 ☐		
	Update		

Click Refresh and check each port status setting.

Port Status Refresh					
Port	Status	Mode	Class	Power Consumption(Watt)	Power Budget(Watt)
1	Enable	AF	---	---	16
2	Enable	AF	---	---	16
3	Enable	AT	---	---	31
4	Enable	AT	---	---	31
5	Enable	AT	---	---	31
6	Enable	AT	---	---	31
7	Enable	AT	---	---	31
8	Enable	AT	---	---	31

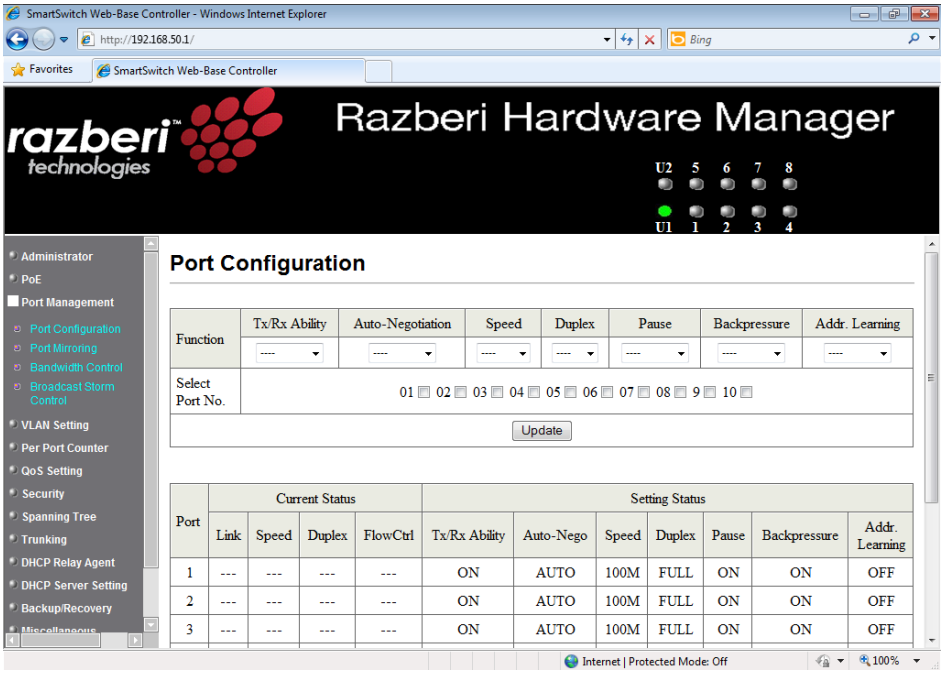
Port Management

Port Configuration

This page allows the administrator to **configure operating mode of the physical port**.

After **selecting the settings**, you should **press the "Update" button** in order for changes to take effect.

The setting will be reflected in the current status window.



Field	Description
Tx/Rx Ability	Enable: Set this port normal operating mode. Disable: Shut down this port.
Auto-Negotiation	Enable/Disable Auto-negotiation.
Speed	Select 1Gbps, 100Mbps or 10Mbps
Duplex	Select Half duplex or Full duplex
Pause	Enable/Disable symmetric pause ability
Backpressure	Enable/Disable backpressure flow control in half duplex mode
Addr. Learning	Enable/Disable MAC address learning ability

Port Mirroring

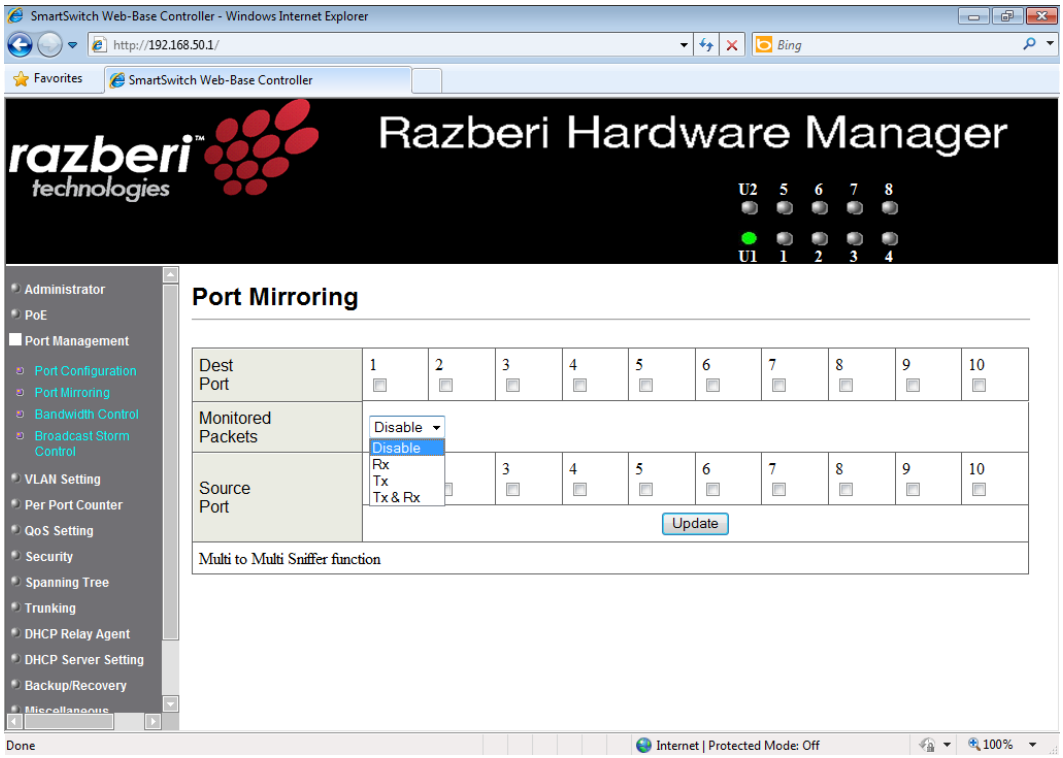
The port mirroring function is accomplished by setting the following items.

(a) **Destination port:** Theoretically it's possible to set more than one destination port in a network. Actually the port mirroring function will lower the network throughput, and therefore it's recommended to set "only one" destination port in a network.

(b) **Source port:** the traffic source that will be copied to the destination port.

(c) Monitored method:

- Disable: means this function is disabled.
- Rx: copy the incoming packets of the selected source port to the selected destination port.
- Tx: copy the outgoing packets of the selected source port to the selected destination port.
- Tx & Rx: the combination of Tx and Rx.



Take the following configuration as an example.

(a) Destination Port: Port 9 - Port 12

(b) Source port: Port 1 ~ Port 4

(c) Mirrored method: Rx

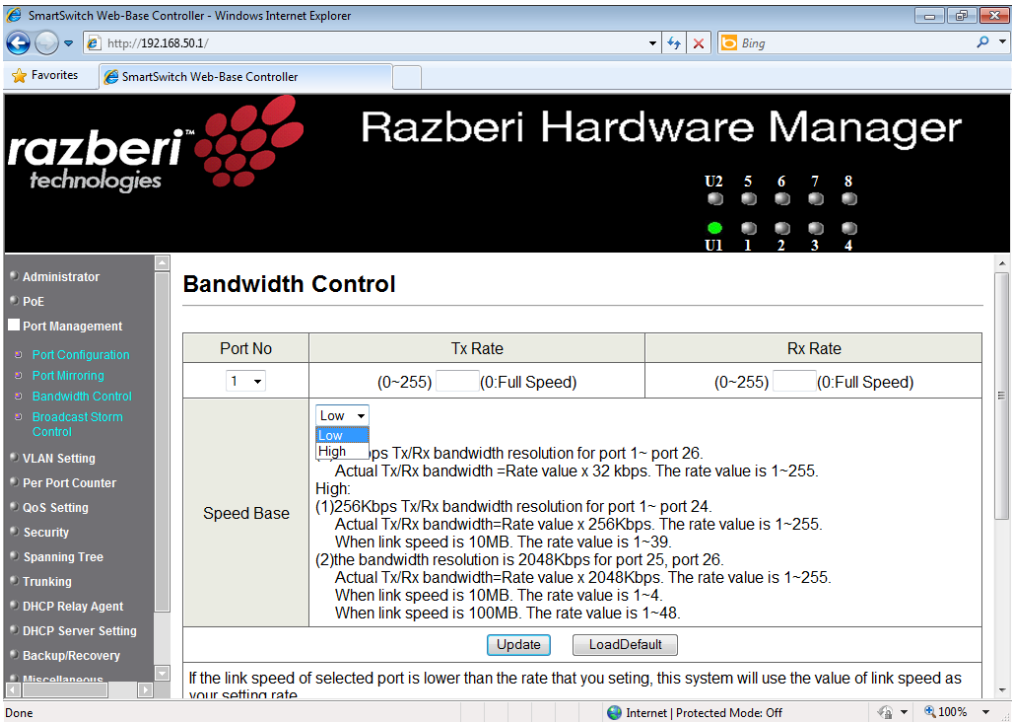
This means that all packets received at ports 1 - 4 will be copied to ports 9 - 12.

Tip: The more source and destination ports that are set, the less network throughput is available for normal traffic.

Bandwidth Control

This page allows the **setting of the bandwidth for each port**. The Tx rate and Rx rate can be filled with the number ranging from 1 to 255. This number should be multiplied by the selected bandwidth resolution to get the actual bandwidth.

In the “Low” mode, the Tx/Rx bandwidth resolution is 32Kbps for port 1~ port 26. In the “High” mode, the Tx/Rx bandwidth resolution is 256Kbps for port 1 ~ port 24, and 2048Kbps for port 25, port 26.



(a) **Low bandwidth for TX**

Example 1: The TX number of the port1~4 is set to 10, 20, 30, 40 respectively, and Speed base is set to “Low”. The real bandwidth comes from the formula of 32Kbps*10, 32Kbps*20, 32Kbps*30 and 32Kbps*40 respectively. After the “Update” button is executed, the real bandwidth will show up in TX fields.

(b) **High bandwidth for TX**

Example 2: The TX number of the port1~4 is set to 10, 20, 30, 40 respectively, and Speed base is set to “High”. The real bandwidth comes from the formula of 256Kbps*10, 256Kbps*20, 256Kbps*30 and 256Kbps*40 respectively. After the “Update” button is executed, the real bandwidth will show up in TX fields.

(c) Low bandwidth for Rx

Example 3: The RX bandwidth number of the port 5~ port 8 is set to 50, 60, 70, 80 respectively, and Speed base is set to “Low”. The real bandwidth comes from the formula of 32Kbps*50, 32Kbps*60, 32Kbps*70 and 32Kbps*80 respectively. After the “Update” button is executed, the real bandwidth will show up in RX fields.

(d) High bandwidth for RX

Example 4: The RX bandwidth number of the port 5~ port 8 is set to 50, 60, 70, 80 respectively, and Speed base is set to “High”. The real bandwidth comes from the formula of 256Kbps*50, 256Kbps*60, 256Kbps*70 and 256Kbps*80 respectively. After the “Update” button is executed, the real bandwidth will show up in RX fields.

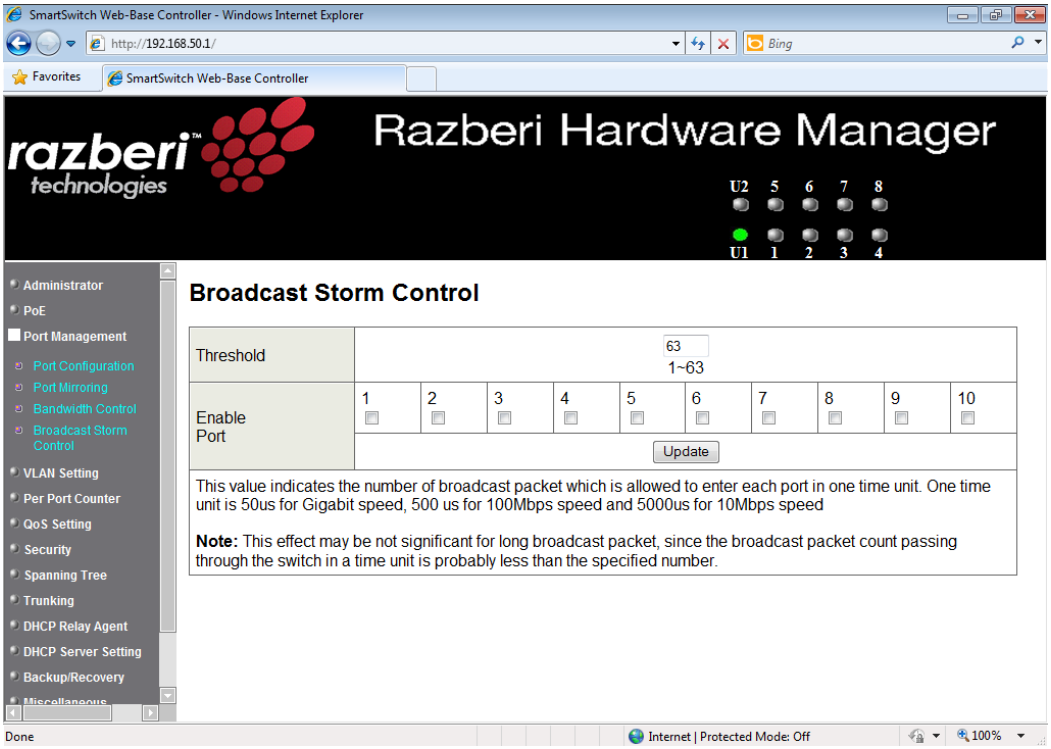
The limitation of the bandwidth control

- The **actual bandwidth should be less than link speed of the port**. 100Mbps link speed for port 25 and port 26, the bandwidth setting should be less than 48 if the bandwidth is set to “High”. 10Mbps link speed for port 25 and port 26, the bandwidth setting should be less than 4 if the bandwidth base is set to “High”. 10Mbps link speed for port 1 ~ port 24, the bandwidth setting should be less than 39 if the bandwidth base is set to “High”.
- Setting the bandwidth to “0” will make the switch running at the “Full Speed”.

Broadcast Storm Control

The broadcast storm control is used to **block excessive broadcast packets** received during the specified time unit. The valid number ranges from 1 to 63.

The broadcast packet is only checked at the selected port and the number of broadcast packets is counted in every time unit.

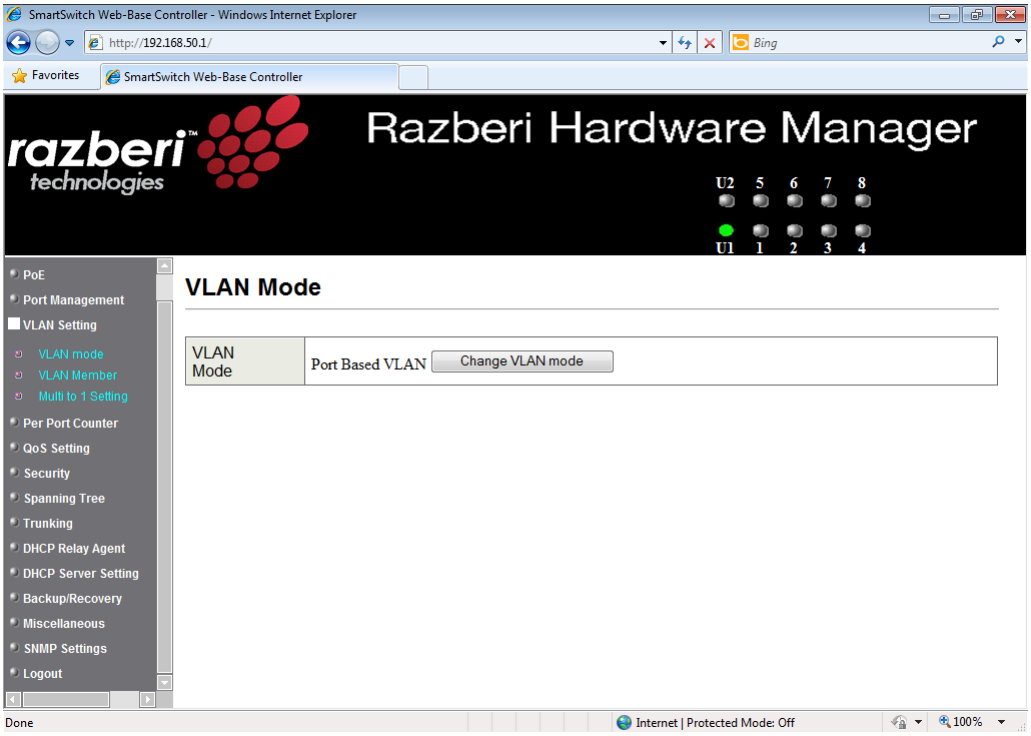


There are **3 options for the selection of the time unit**, as the figure shown above. Once the broadcast storm protection is enabled, the excessive broadcast packet will be discarded. For those broadcast packets incoming from the un-selected port, the switch treats it as the normal traffic.

VLAN Setting

VLAN mode

The managed switch supports **two VLAN modes, tag based and port based**. Only one VLAN mode can be enabled at one time.



When the tag based VLAN is selected, **the administrator can define the handling method of a VLAN tag to the specified port**, including “Add Tag”, “Don’t care” or “Remove Tag”.

(a) “Add Tag” means the outgoing packet should contain a 802.1Q tag.

- The 802.1Q tag will be inserted to the outgoing packet of the selected port if the packet received at the source port does not contain 802.1Q tag.
- The original 802.1Q tag will be kept if the source port received a packet with 802.1Q tag.

(b) “Don’t Care” means the outgoing packet of the selected port keep the original packet format of the source port.

(c) “Remove Tag” means the outgoing packet should not contain a 802.1Q tag.

- The 802.1Q tag of the outgoing packet of the selected port will be removed if the incoming packet received at the source packet contains 802.1Q tag.
- The packet format of the source port will be kept if the packet does not contain the 802.1Q tag.

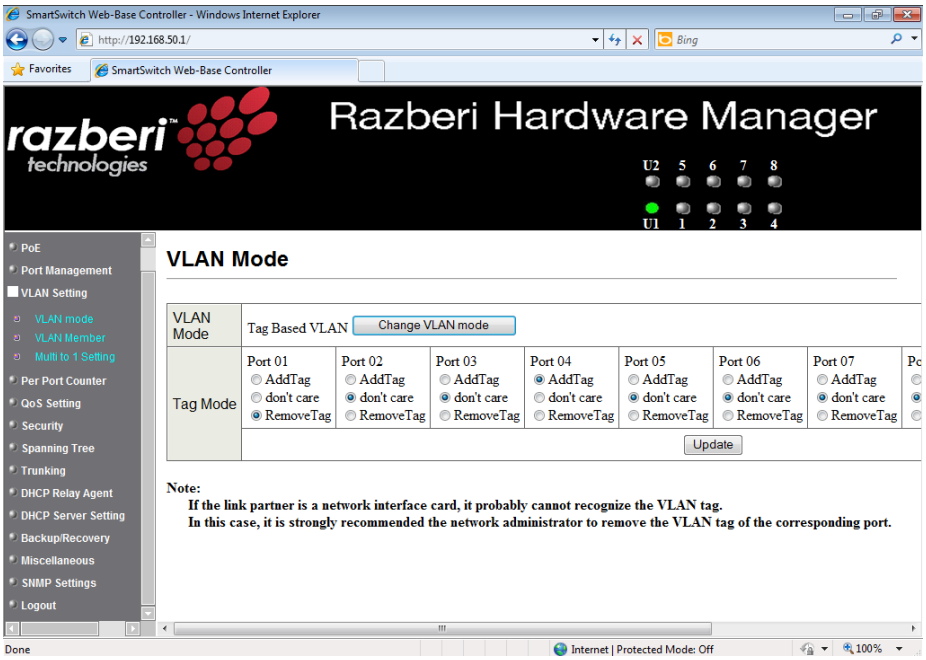
Tip: In tag-based VLAN mode, adding a tag on the port that is being used to configure the switch is not allowed because some NICs cannot recognize the 802.1Q tag.

Example:

Port 1: The 802.1Q tag of every packet outgoing from this port will be removed.

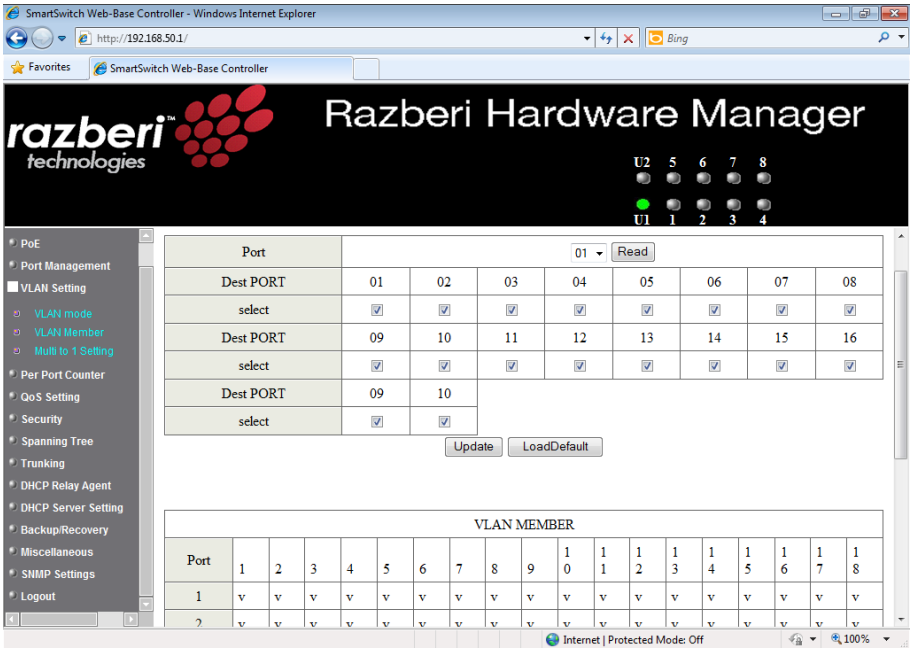
Port 4: The 802.1Q tag of every packet outgoing from this port should be included.

Other ports: keep every outgoing packet intact.



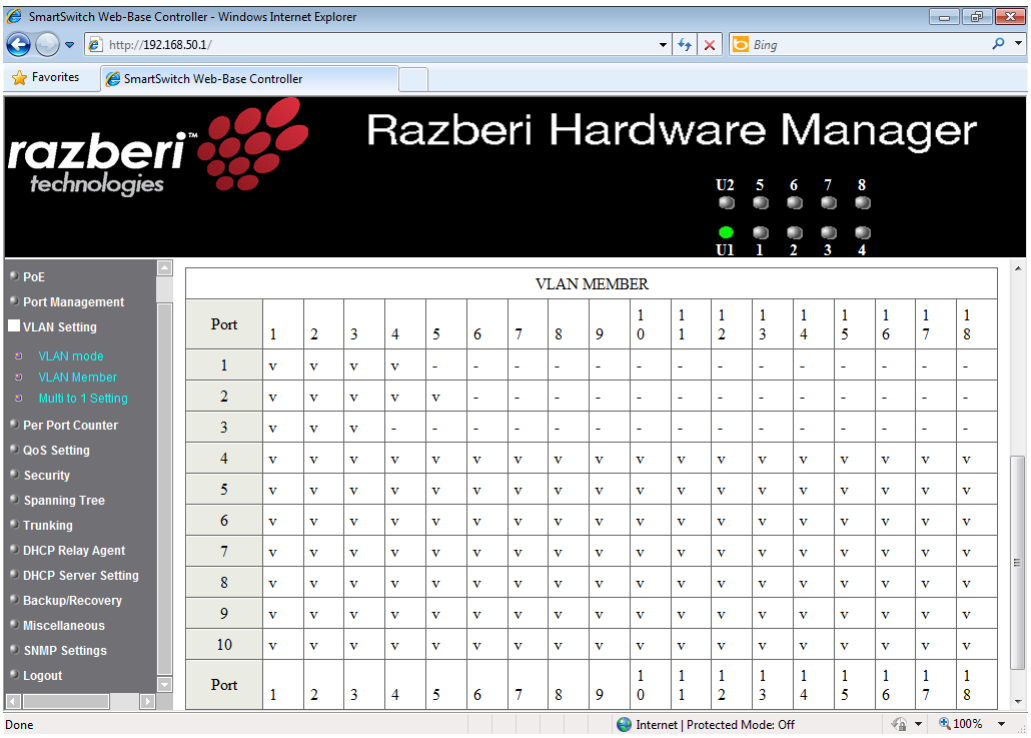
VLAN Member Setting – Port Based

This web page is designed based on the VLAN member of each port. The following examples illustrate how to configure VLAN in this mode. The Table is configuring the port-base VLAN member of each port. When the port receives the packets it allows forwarding only to the VLAN member of this port.



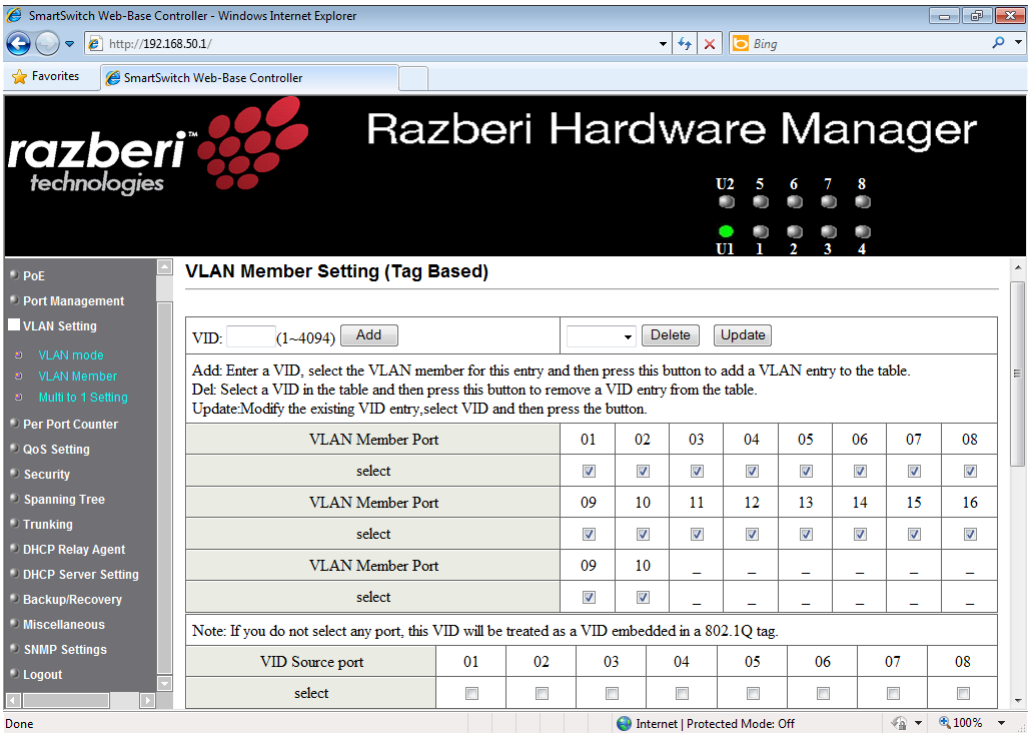
Field	Description
Read	• Select the ports of which you want this port to read VLAN member • Press “Read” button
Update	• Select the VLAN member which you want to update. • Press “Update”
LoadDefault	• Press this button to load default VLAN setting.

Example:



(a) Port 1 received packets can only forward to port 2, port 3, and port 4.
(b) Port 2 received packets, can only forward to port 1, port 3, port 4, and port 5.
(c) Port 3 received packets, can only forward to port 1 and port 2.

VLAN Member Setting – Tag Based



Field	Description
Add a VLAN	Enter a VID, select the VLAN member and click the VID source port and then enter a group name. Finally press “Add” button to send this command. The VLAN will be added to the list.
Delete a VLAN	Select a VID and press “Delete” to remove a VLAN.
Modify a VLAN	Select a VID which you want to modify. After the web page shows up, select the VLAN member and VID source port and then press “Update”.

Add a VLAN Group

Step 1: Enter VID. The following example shows VID=45

Step 2: Select VLAN member

Step 3: Select the source port corresponding to this VID. You can select more than one port.

Step 4: Press “Add” to add a VLAN group.

Modify A VLAN Group

Step 1: Select/De-select the VLAN ID

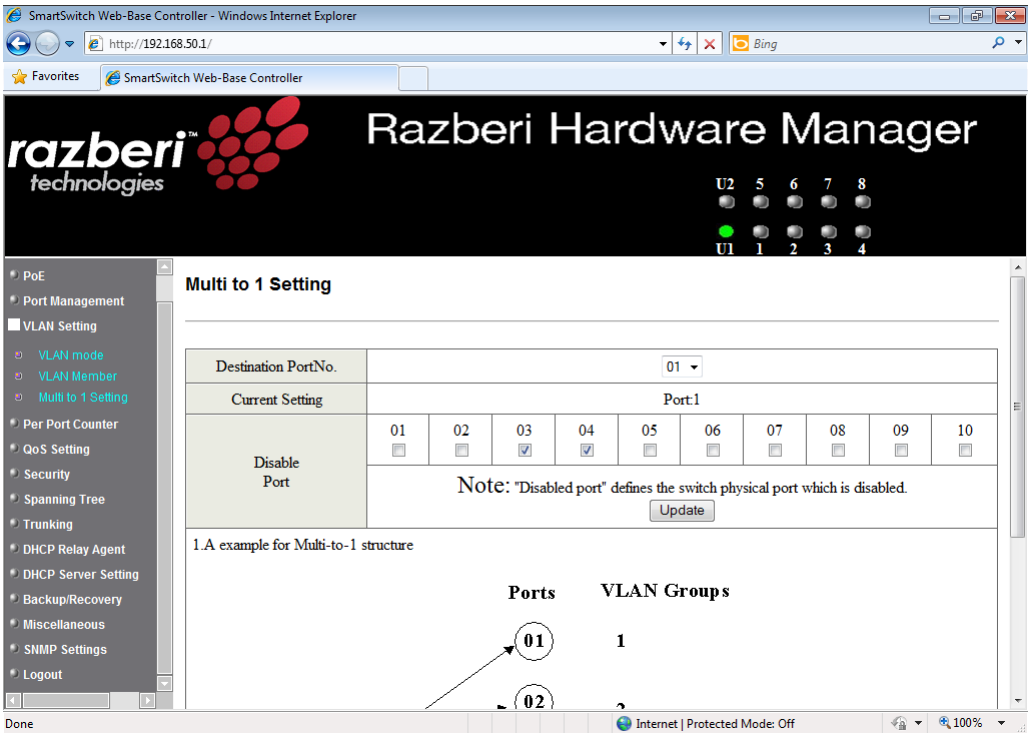
Step 2: Select/De-select VID source corresponding to this VID

Step 3: Press “Update”

Multi-to-1 Setting

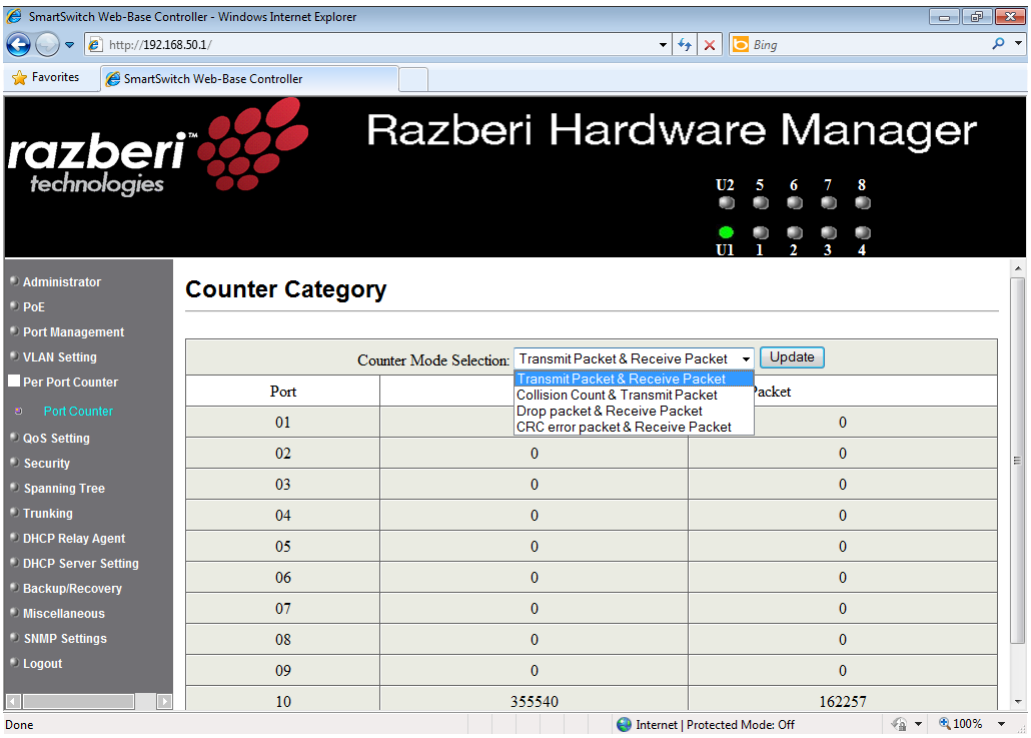
Multi-to-1 VLAN is used in CPE side of Ethernet-to-the-Home and is exclusive to VLAN setting on ”VLAN member setting“. In the other words, once multi-to-1 is set, the previous VLAN setting will be overridden. The “disable port” refers to the port which will be excluded in this setting. All ports excluded in this setting are treated as the same VLAN group.

In the following example, ports 3 and 4 are excluded in this VLAN. Furthermore these ports are treated as members of other VLAN. All ports that are not specified in this table communicate only with port 1.



Per Port Counter

This page provides a **port counter for each port**. There are 4 groups of statistics in total. These 4 categories cannot work simultaneously. Once you change the counter category, the counter will be cleared automatically.

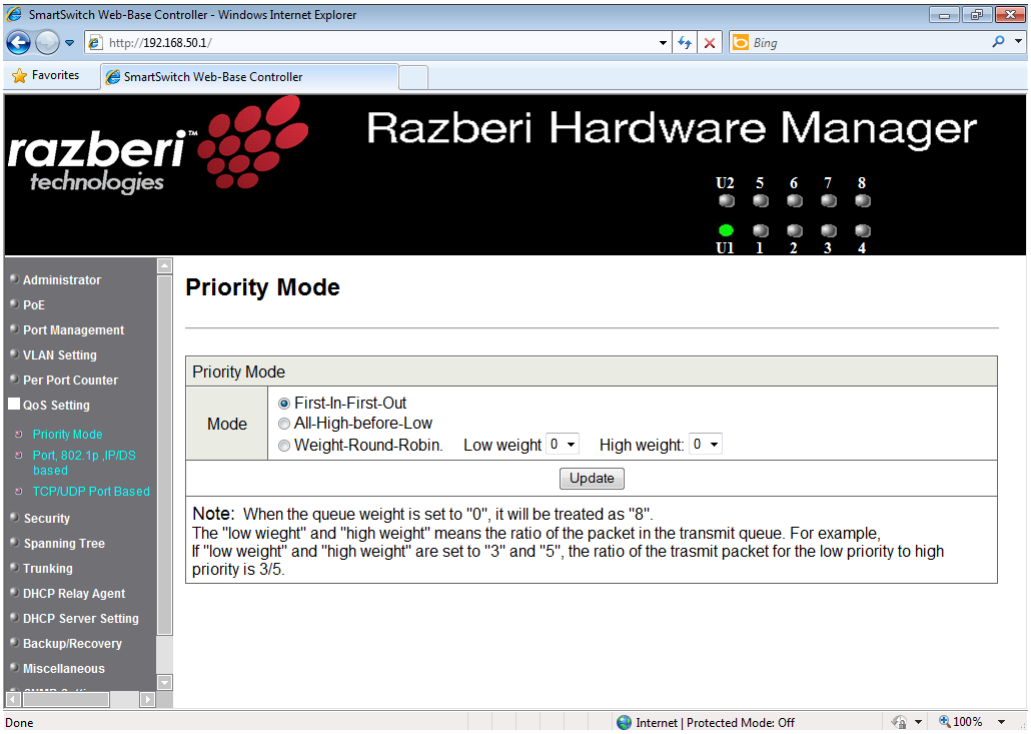


Field	Description
Transmit Packet & Receive Packet	This category shows both the received packet count (excluding the incorrect packet) and the transmitted packet count.
Collision Count & Transmit Packet	This category shows the packets outgoing from the switch and the count of collision.
Drop Packet & Receive Packet	This category shows the number of received valid packet and the number of dropped packet.
CRC error Packet & Receive Packet	This category shows the received correct packet and received CRC error.
Refresh	Press “Refresh” button will aggregate the number of the counter for all ports.
Clear	Press “Clear” button will clear all counters.

QoS setting

Priority Mode

This page allows the administrator to **set the scheduling mode** for the TX packets at each port.



Field	Description
First-In-First-Out (FIFO)	All output packet are queued to one queue, first comes first out.
All-High-before-Low (Strict priority)	All packets will be assigned to either high priority queue or low priority queue. The low priority packet will not forwarded until the high priority queue is empty.
Weight-Round-Robin (WRR)	There are 2 priority queues for Weighted-and-round-robin (WRR) mode. When this mode is selected, the traffic will be forwarded according to the number set in each queue. The queue ID has nothing to do with the priority.

Example:

If High, Low queue are set to 5, 3, then the traffic at the specific port will go out in the following sequence: 5 packets stored in High queue, 3 packets stored in Low queue, 5 packets stored in High queue, 3 packets stored in Low queue, etc.

Class of Service Configuration

There are 4 types of CoS for this setting: **TCP/UDP port number**, **IP TOS/DS**, **802.1p priority tag**, and **physical port**. The administrator can select more than one item for each port.

Tip: If more than one type of CoS is selected the switch will arrange the packet to the assigned queue according to the following priority: TCP/UDP Port Number, IP ToS/DS, 802.1p Priority Tag, Physical Port. **TCP/UDP Port Number will override all other CoS settings**.

For 802.1p priority tag, the following table is used to map the 802.1p field to the priory queue.

Priory Field	Priority Queue
4,5,6,7	High
0,1,2,3	Low

For IP TOS/DS priority, there are 7 kinds of TOS field can be assigned to High or Low queues. i.e; 6'b101110, 6'b001010, 6'b010010, 6'b011010, 6'b100010, 6'b110000 and 6'b111000.

Class of Service

The administrator can select **the protocol that will be forwarded as the specified mode**. There are 3 administrator-defined UDP/TCP port groups and many well-known TCP/UDP ports. The administrator-defined port number may be a range or a specific number, depending on the mask.

The operating theory for all 4 CoS types can be illustrated by the following figure and table.

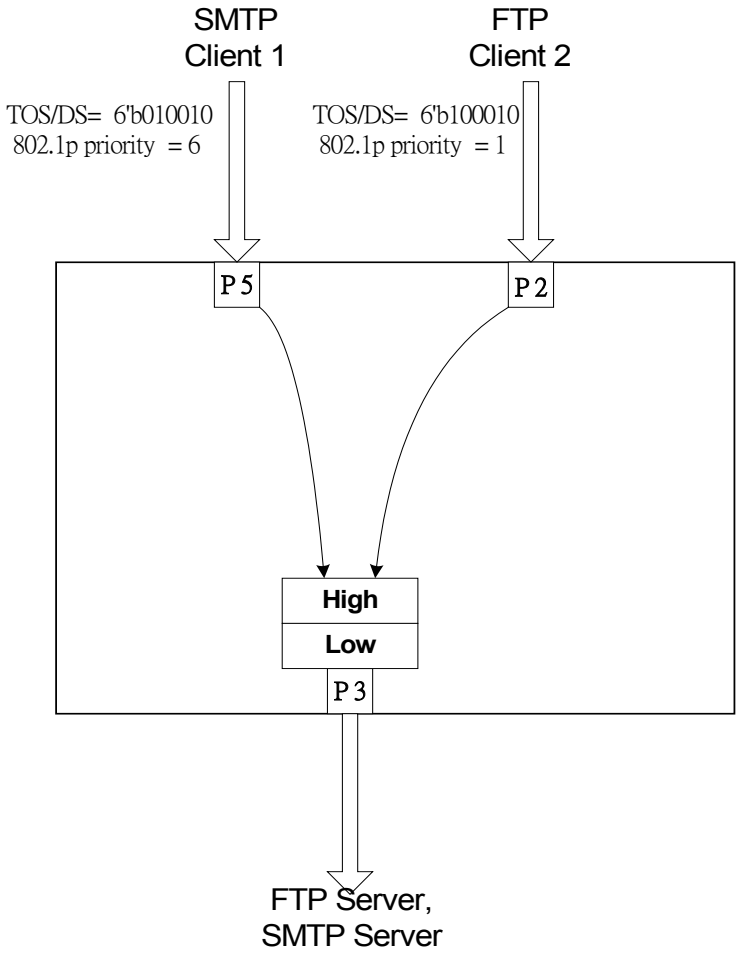
TCP/UDP CoS, IP TOS/DS, 802.1p are global setting for all ports and has no relation with the physical port.

Example:

(a) **Priority Mode:** WRR. High weight=4; Low weight=2
(b) **TCP/UDP CoS:** P2 FTP =>High queue; P5 SMTP => Low queue
(c) **TOS/DS setting:** P5 TOS 6'b010010=High queue; P2 TOS 6'b100010=Low queue
(d) **802.1p:** P2 802.1p = 6(High queue); P5 802.1p =1(Low queue)
(e) **Physical port:** P5=High queue; P2=Low queue

According to the rule described above, the CoS will be executed in the following sequence:

TCP/UDP > TOS/DS > 802.1p > Physical



The actual CoS will behave like this table.

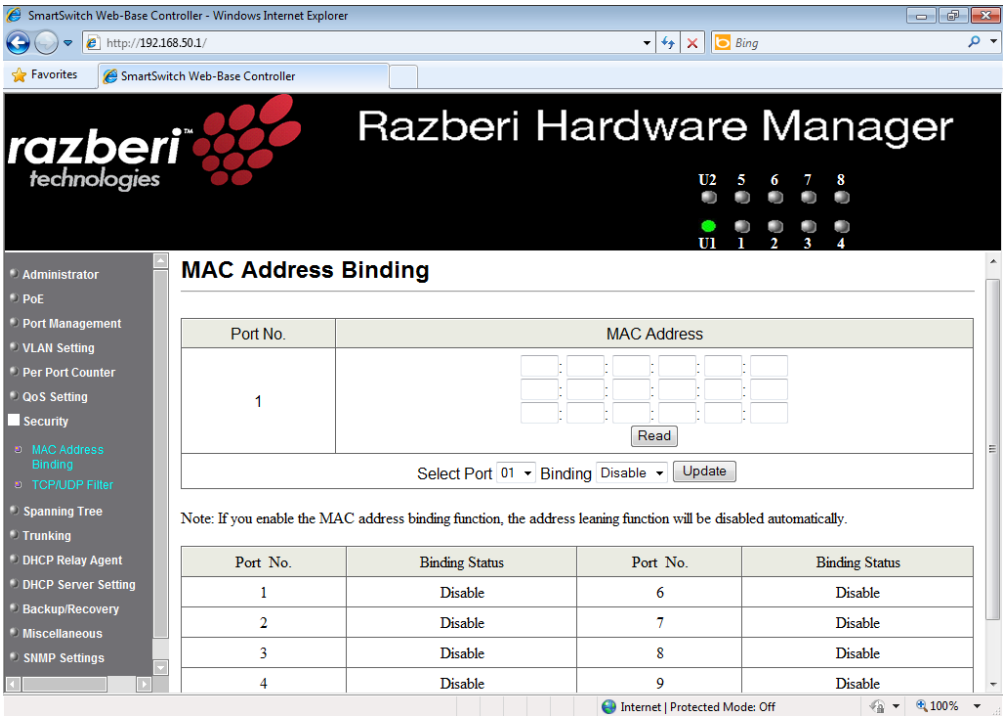
Switch Behavior Observed on P3	Comment
4 packets coming from P2; 2 packets coming from P5; 4 packets coming from P2; ……	If TCP/UDP CoS is enabled, the other CoS setting will be ignored.
2 packets coming from P2; 4 packets coming from P5; 2 packets coming from P2; ……	If TCP/UDP CoS is disabled, the switch will check TOS/DS CoS.
4 packet coming from P2; 2 packets coming from P5; 4 packets coming from P2; ……	If TOS/DS CoS is disabled, the switch will check the 802.1p field.
2 packet coming from P2; 4 packets coming from P5; 2 packet coming from P2; ……	If only physical port CoS is enabled, the switch only check the physical port CoS.

Security

MAC Address Binding

This function provides a method for the administrator to **specify the relationship between the physical port and the MAC address**. Only the packet with specified source MAC address can communicate with other port. By specifying the MAC address to each port, the network administrator can prevent the unauthorized administrator from accessing the switch. Each port can bind up to 3 MAC addresses.

To activate the port binding function, you should **enter the correct MAC address**, select **the port number**, **set the port binding to "Enable,"** and **press "Update"**.



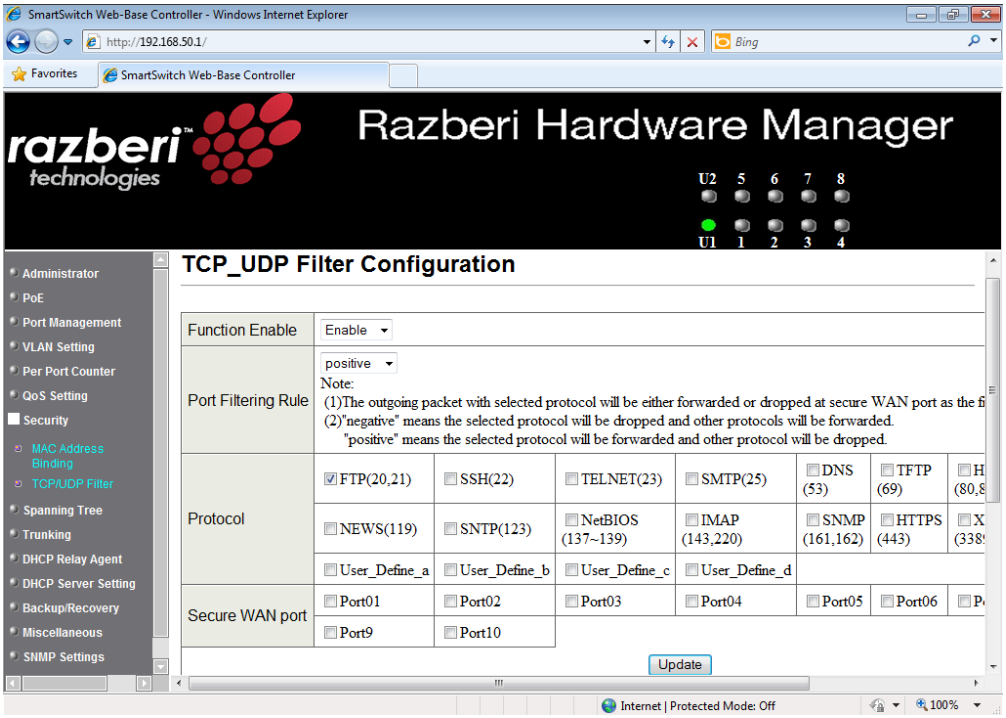
Tip: Setting the multicast address to these fields is **not** allowed. A warning message will appear if you attempt to do so.

TCP/UDP Filter

By selecting the TCP/UDP port, the network administrator can **optionally block some specific applications**. There are two kinds of protocol filter functions. The "**positive**" function makes the switch forward the selected protocol and drop other protocols. The "**negative**" function makes the switch drop the selected protocol and forward other protocols. The protocol is checked at the secure WAN port. And it should be set at the server side.

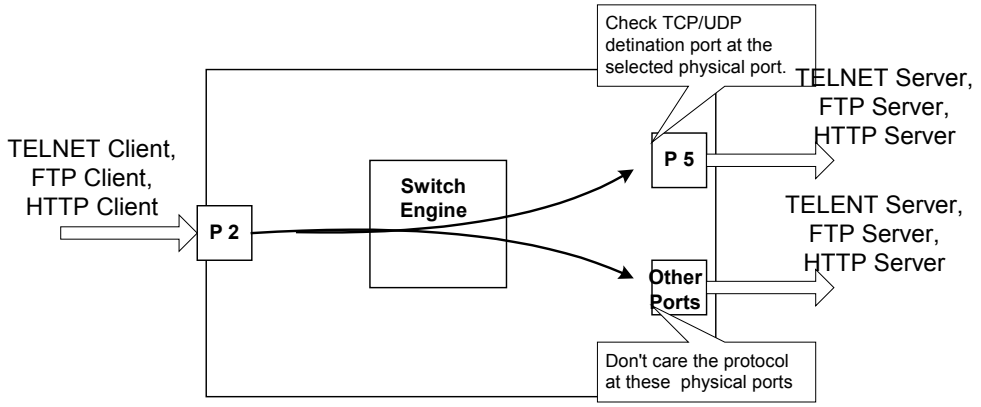
Example:

(a) Enable TCP/UDP Filter function.
(b) Select “positive” rule.
(c) Set port 5 as secure WAN port and select FTP and TELNET as the filtering protocol.
(d) Place the server of the selected protocol at the secure WAN port.



Result:

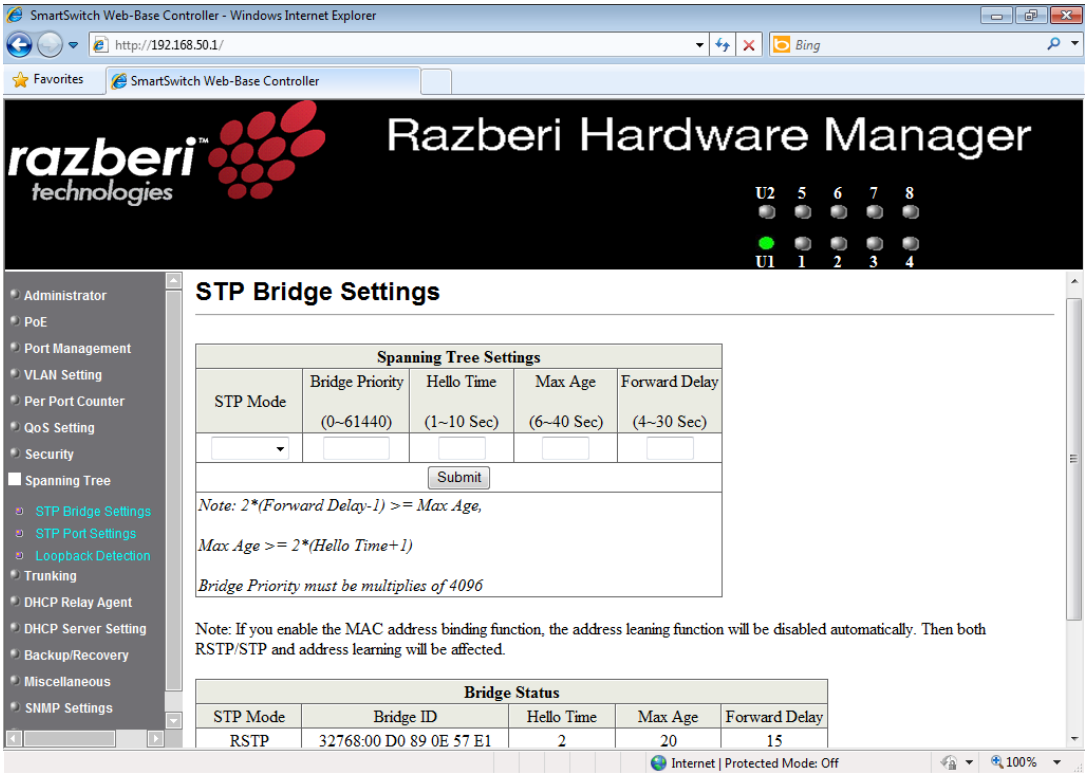
Physical Port	The Behavior of Switch
Port 5	TELNET and FTP will be forwarded. Other protocol will be discarded.
Other ports	All protocol will be forwarded as the normal packet.



A Brief Description for Secure TCP/UDP Port

Spanning Tree

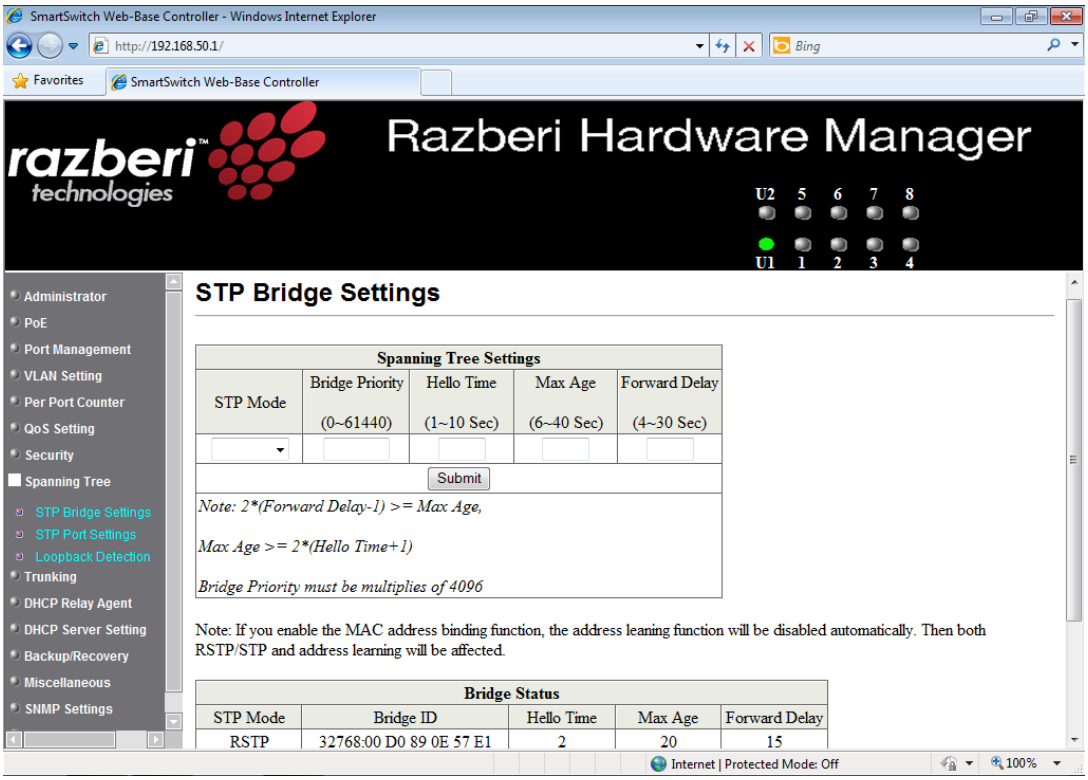
STP Bridge Settings



Field	Description
STP Mode	• Disable: Disable RSTP/STP. • STP: Enable STP function. • RSTP: Enable RSTP function, including STP.
Bridge Priority	This field in conjunction with the MAC address forms the Bridge ID. The lowest number of the Bridge ID in a Spanning Tree domain will be selected as the root. Enter a multiple of 4096 this field.
Hello Time, Max Age and Forwarding Delay	These fields control how this device handles BPDU. The relationship of these fields is listed below.

Tip: 2*(Forward Delay-1) >= Max Age, Max Age >= 2*(Hello Time+1)

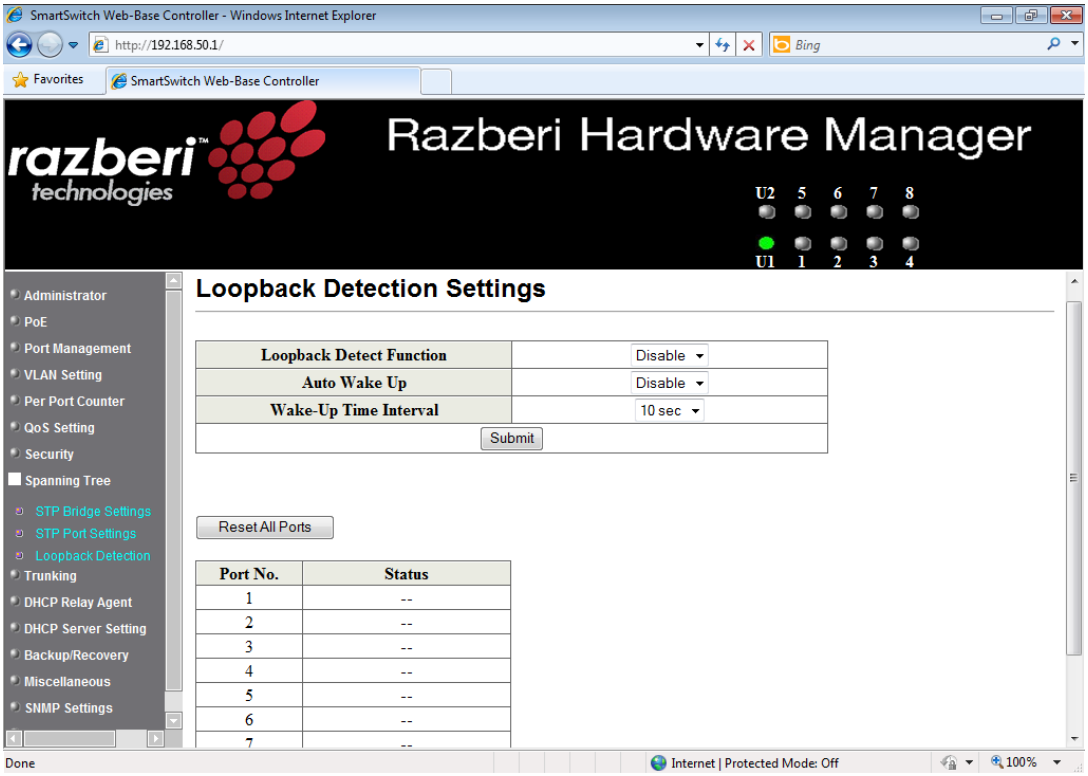
STP Port Settings



Field	Description
Port No.	To configure the parameters of RSTP/STP port, the administrator should select a physical port number, assign a priory number, enter the RPC and then press “Submit” button.
Priority (0~240)	Priority field defines the priority of the RSTP/STP port. The lower the number is, the higher possibility it will become a root port. There is a default value for each port.
RFC (0~200000000)	RPC stands for “Root Path Cost”. The higher the cost is, the lower possibility it become a root path. In the general case, the physical port with the higher bandwidth will be assigned a lower cost.

Loopback Detection Settings

This web page provides loopback detection function. When loopback detection function is enabled and a port received it's own BPDU, the detection agent drops the loopback BPDU and places the interface in discarding mode. This loopback status can be released automatically, if auto wake up function is enabled.



Field	Description
Loopback Detect Function	Enable/Disable the loopback detect function.
Auto Wake Up	Enable/Disable auto wake up for loopback detection of each ports.
Wake-Up Time Interval	Set auto wake up time value.

Trunking

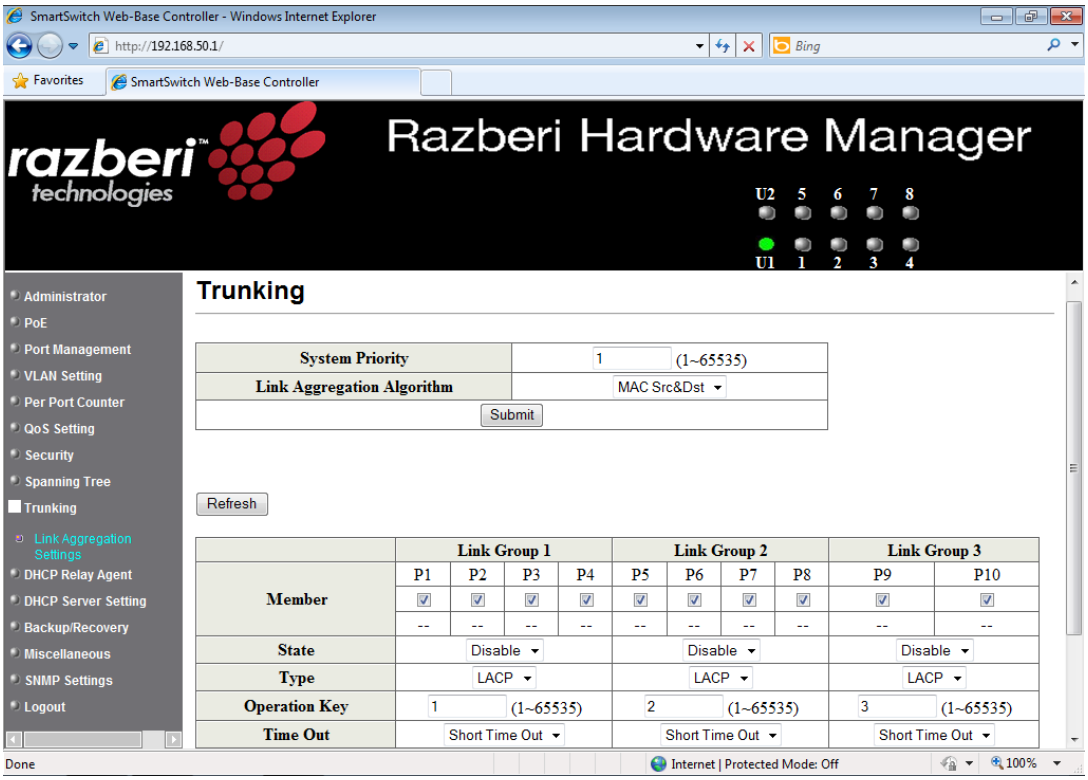
This page is used to **set trunk group** for load balance and cable link auto-backup.

There are 2 methods to set a trunk: **Static** and **LACP**.

The meaning of each field shown in the following table is explained as following.

The managed switch supports three trunk groups, which can set port 1 - port 8, port25 and port 26, and trunk 1 consists of port 1 - port 4, trunk 2 consists of port 5 - port 8, trunk 3 consists of port 25, port 26.

Trunk hash algorithm can be selected according to 2 different methods.



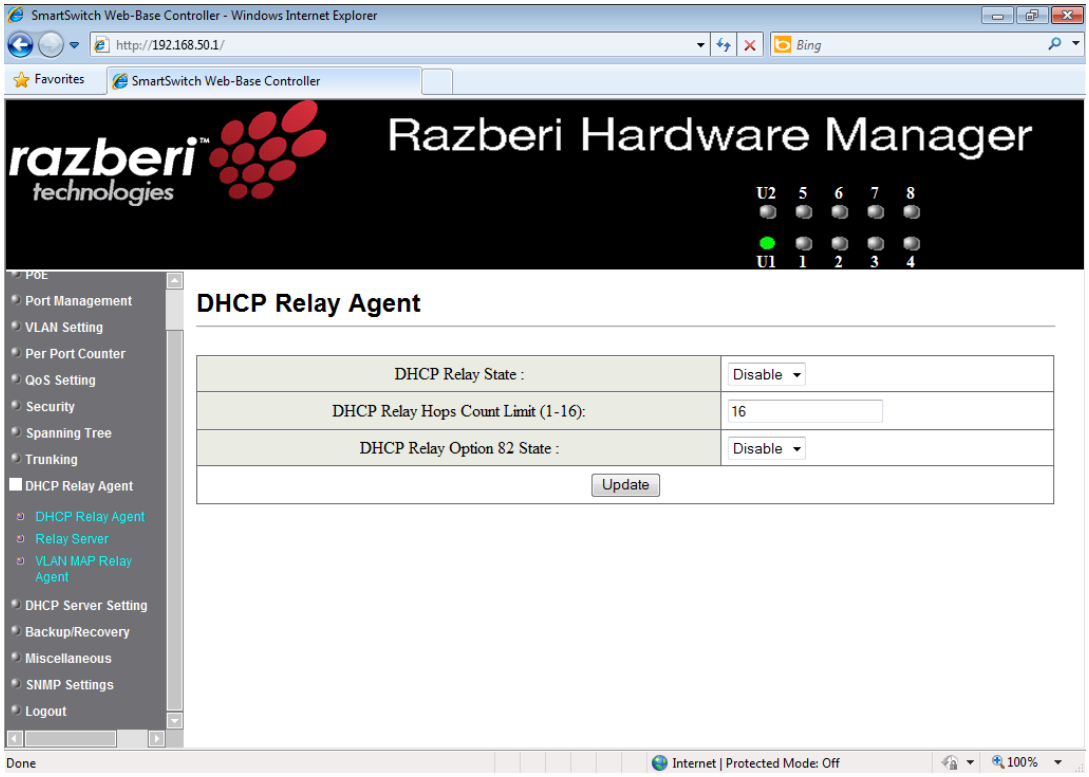
Link Aggregation Algorithm	Description
SA	Among the trunk member ports, the packet will be distributed based on the source MAC address.
DA XOR SA	Among the trunk member ports, the packet will be distributed based on the XOR calculation result of the source MAC address and the destination MAC address.

Field	Description
Member	There are three configurable trunk groups. "--" means the trunk has not been built on the corresponding port. "A" means trunk has been built on the corresponding port.
State	Administrator can enable/disable the function of this trunk.
Type	• Static: Static setting by manual. • LACP: Setting by ACP.
Operation Key	Assign an operation key for this device
Time out	• Short Time Out: Re-configure LACP trunk every 1 second. • Long Time Out: Re-configure LACP trunk every 30 second.
Activity	You should set at least one side of each trunk to "Active" state. If both sides of a trunk are all set to "Passive", LACP trunk will never be built up.

DHCP Relay Agent

Relay Agent Configuration

This web page allows the administrator to **enable/disable DHCP Relay Agent function**. In addition, option 82 message is selectable by setting.



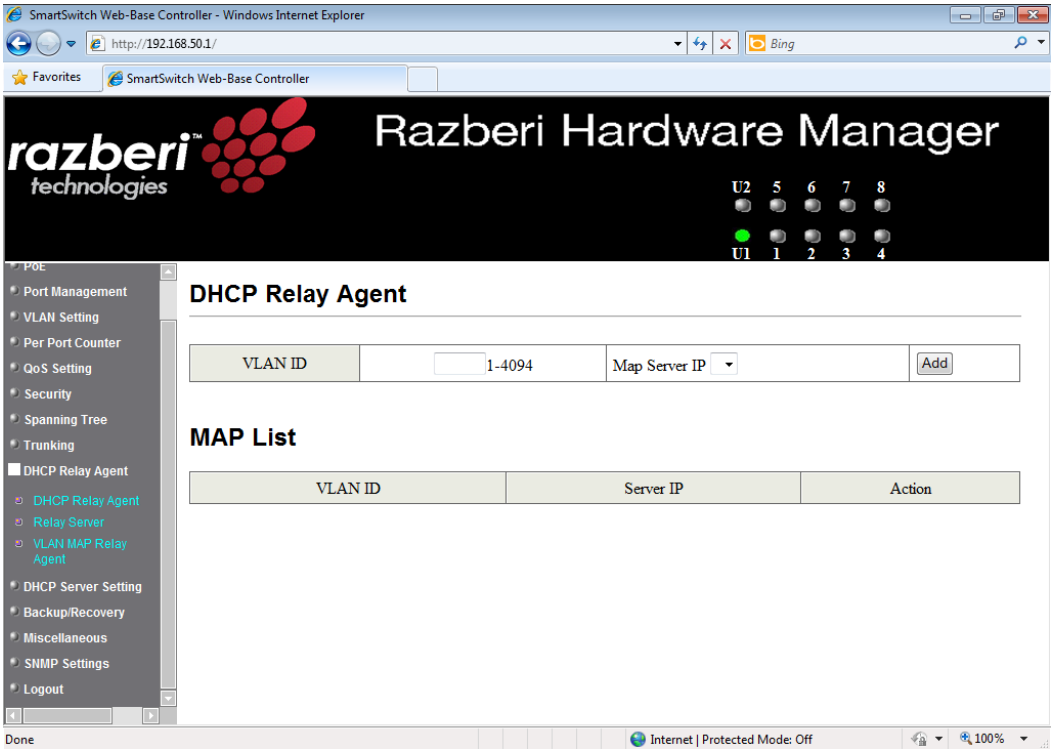
Field	Description
DHCP Relay State	Allow the administrator to enable/disable Relay Agent function.
DHCP Relay Hops Count Limit	Specify the maximum number of Relay Agent traveling from DHCP agent to DHCP server.
DHCP Relay Option 82 State	The pre-condition for enabling/disabling this function is that 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.

Server IP List

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

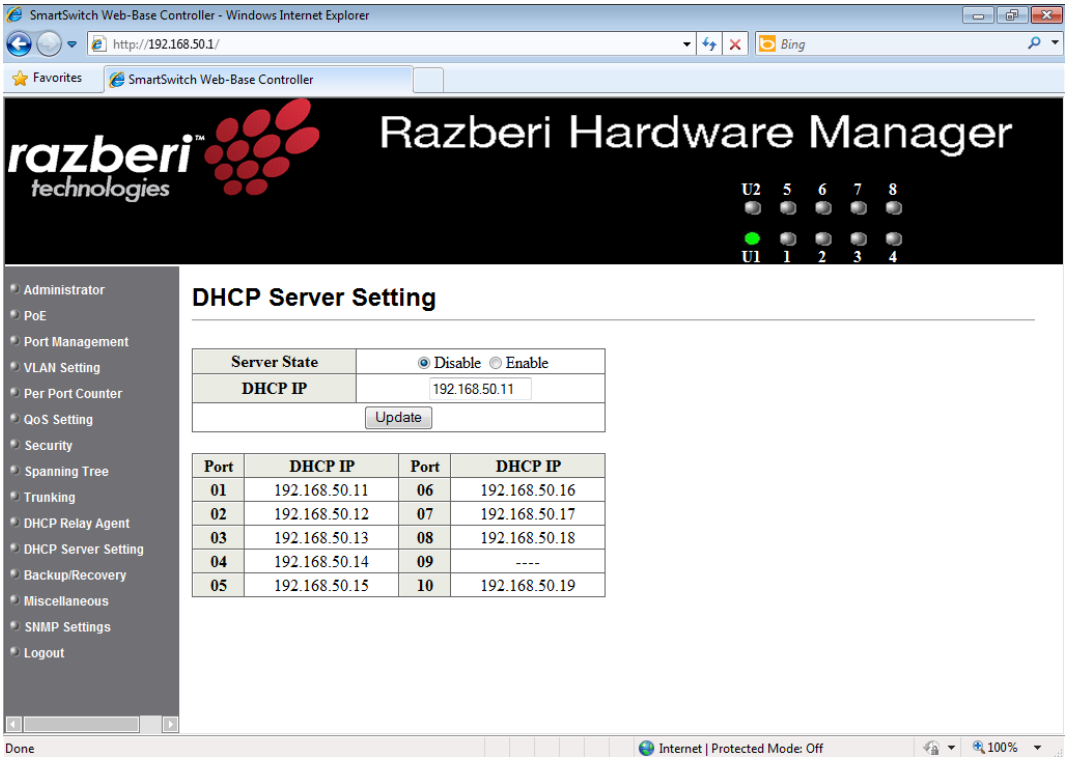
VLAN to Server IP Map

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



DHCP Server Setting

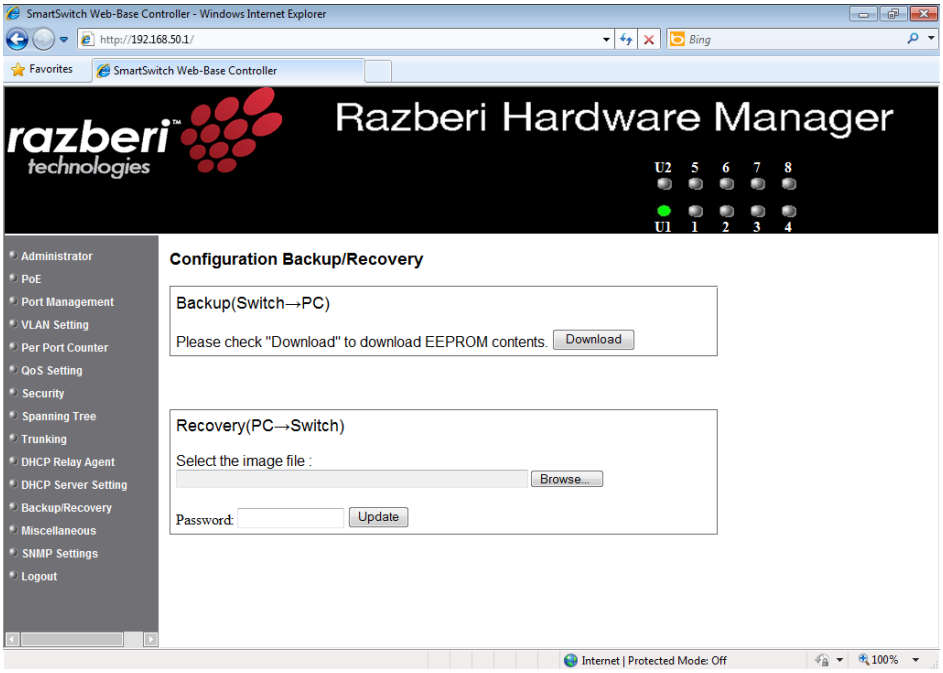
This page allows enabling or disabling of the DHCP Server and the viewing of the IP address of each port.



Tip: Each server can belong to only one VLAN ID. A warning message will appear if you attempt to set one server address to multiple VLAN IDs.

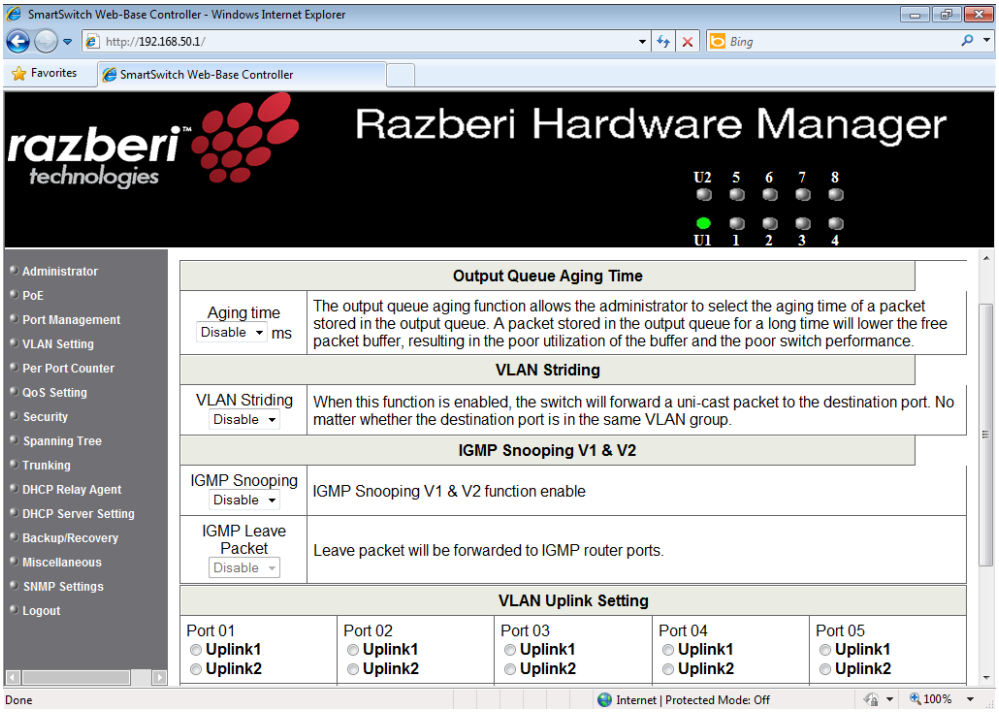
Backup/Recovery

This function provides the administrator with a method to **backup/recover** the switch configuration. The administrator can save configuration file to a specified file. If the administrator wants to recover the original configuration, which is saved at the specified path, just enter the password and press the "Upload" button. The backup configuration of the switch will then be recovered.



Tip: The switch will check that the uploaded file is correct. If the content of the file is incorrect, the switch will show a warning message.

Miscellaneous Settings



Output Queue Aging Time

This function is used to **avoid the poor utilization of the switch**. When a packet is stored in a switch for a long time, the time slot defined by the protocol will expire and this packet becomes useless. To prevent these useless packets from wasting the bandwidth, this switch provides an option to enable the queue aging function. Once enabled, the switch will monitor the aging timer for each packet before it is sent out. A packet that stays in a queue for a long time will be discarded.

VLAN Striding

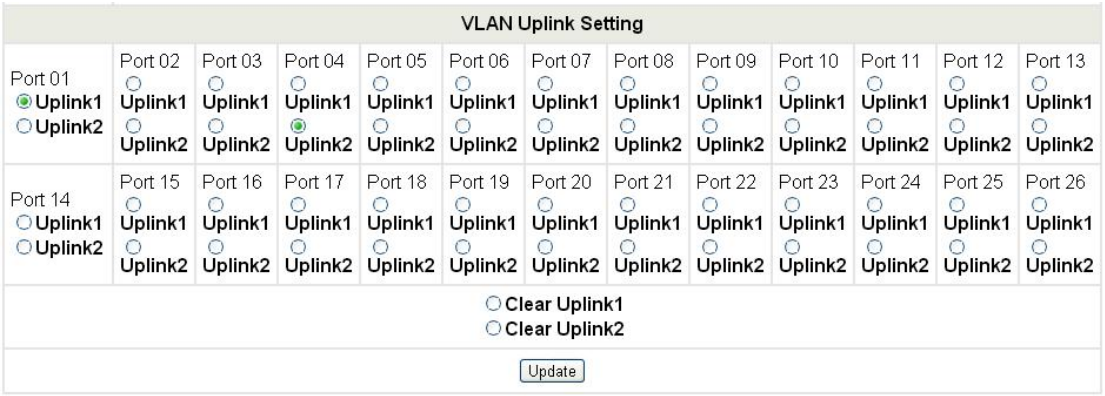
By selecting this function, the switch will **forward uni-cast packets to the destination port**, no matter whether destination port is in the same VLAN.

IGMP Snooping

When this function is enabled, the switch will **execute IGMP snooping version 1 and version 2 without the intervention of CPU**. The switch automatically handles IGMP report packets. When the user enables "Leave packet will be forwarded to IGMP router ports" function. If members want to leave this multicast group, the IGMP leave packet will be forwarded to the router ports.

VLAN Uplink

In the VLAN, the user can **define the "Uplink port"**. This is normally the port that attached to the uplink router. This feature is similar to the "Router port". After that is set, any frame transferred to the other VLAN member is forwarded only out the uplink port.



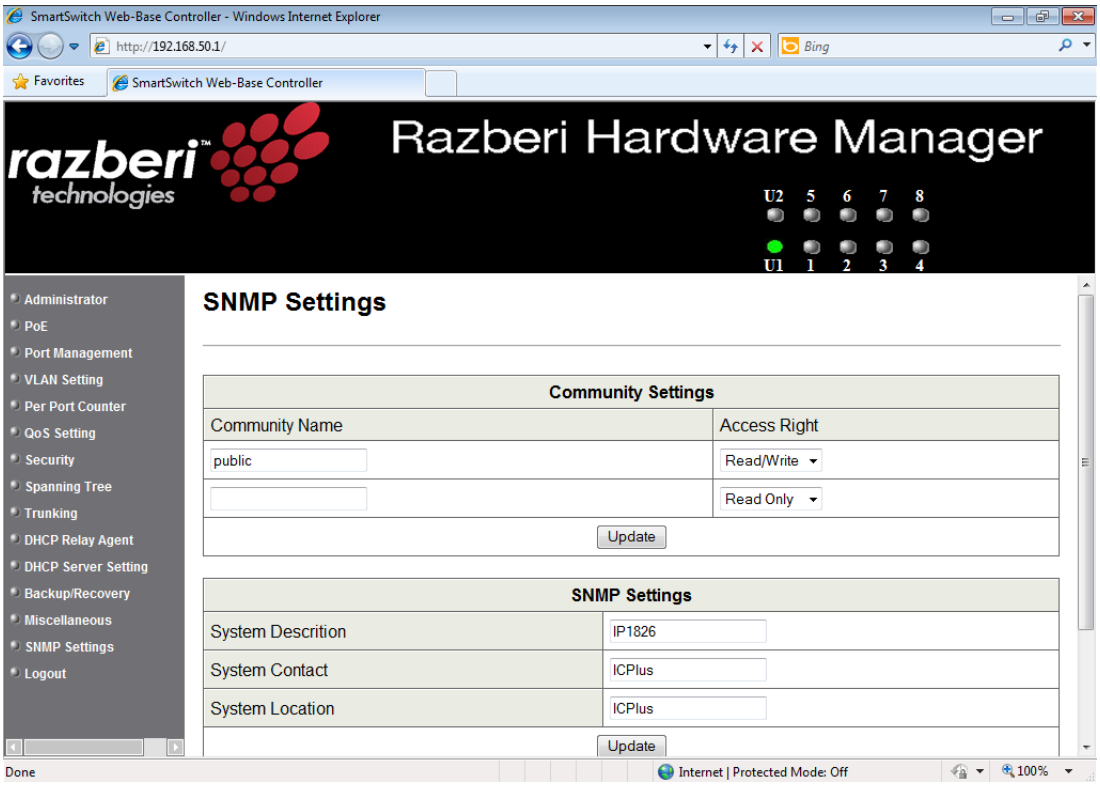
For example:

Step 1: set port 1, 2 and 3 are the same VLAN; set port 4, 5 and 6 are the same VLAN.

Step 2: set port 1 is uplink port of Uplink 1, set port 4 is uplink port of Uplink 2, and press "Update" button.

Step 3: If port 2 wants to send a uni-case packet to port 5, the packet will be transferred to port 1.

SNMP Settings

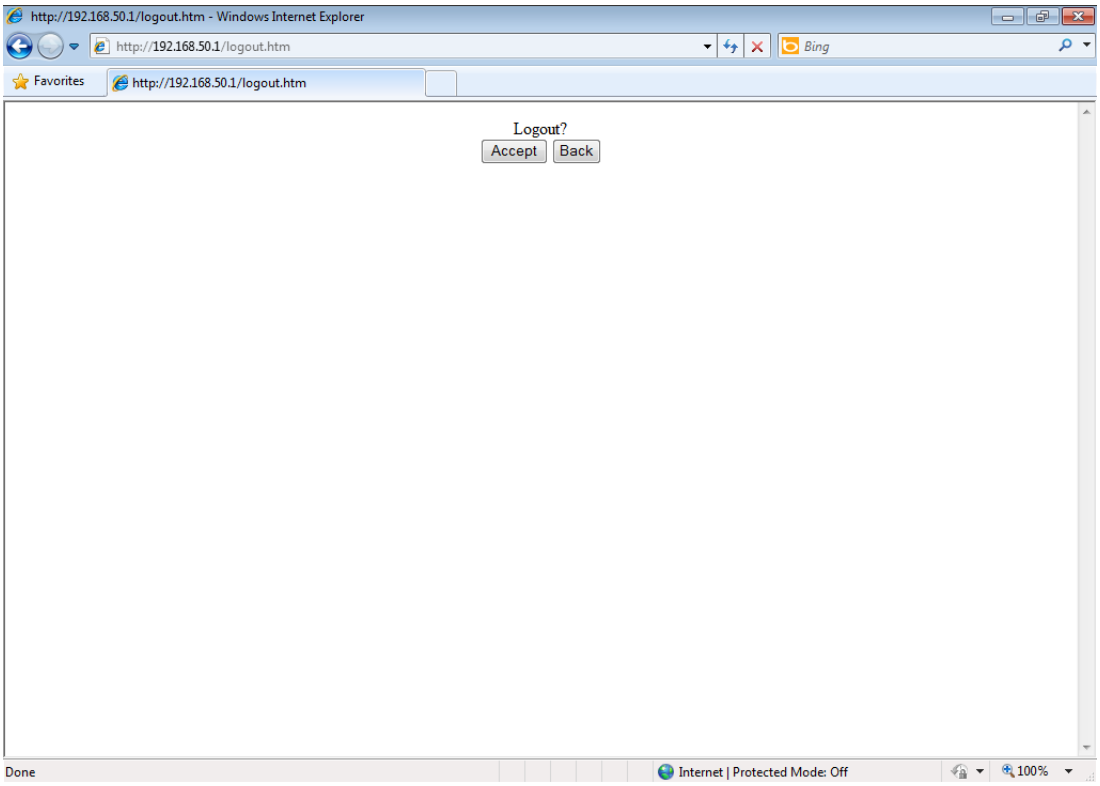


Field	Description
Community Name	This field allows the administrator to enter the community name.
Access Right	This filed defines the access attribute. “Read only” means the administrator can view this community only. “Read/Write” means the administrator can view and modify this community.

Field	Description
System Description	The administrator can enter a device name for the identification in the network.
System Contact	The contact person responsible for maintaining network.
System Location	The location of this device.
Trap State	Enable/Disable trapped event. The trapped event are: • Power up event. • Physical port status change event.

Logout

This is the administrator logout page. Press the “Accept” button to logout. Press the “Back” button to browse the previous web page.



Load Default Settings – Hardware Based

The purpose of this function is to provide a method for the network administrator to restore all configurations to the default value. To activate this function, the administrator should follow the following procedures.

(a) **Press the “Load Default” button for 3 seconds** until you see the LoadDefault LED blinking.

(b) When LED starts blinking, it means the CPU is executing the “load default” procedure. You can release the button now.

After completing this procedure, **all the factory default value will be restored**. This includes the IP address, administrator name, password, and all switch configurations.