

Switch WSW-2620

Web-Based Management

Network Management Manual

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REVISION

PLANET Web Switch Series Web Management User's Guide for model

WSW-2620

Revision 1.0 (April 1999)

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Chapter 1

Introduction

This manual provides information for using Web-Based Management to configure and monitor Switch WSW-2620. The manual is for network administrators, who have a basic knowledge of Local Area Networks (LAN), and are responsible for setting up the network.

Web-Based Management

With Web-based Management, Switch WSW-2620 can be managed from anywhere and with any platform using a Web Browser. A complete web server is embedded into the switch with integrated HTML forms and Java™, displaying an easy to use, familiar point and click interface. For total network protection, standard web security, is also embedded.

A brief description of the each of the main topics covered in this manual follow.

Basic

Chapter 2, Basic, covers the home page, system information, management capability setup, networking for Ethernet, networking for SLIP, the management port for console management and management port for out of band management.

Control

Chapter 3, Control, introduces the many controls used to configure the switch, ports, permanent addresses, virtual LANs, STP groups and settings for the trunk group.

RMON

Chapter 4, RMON, introduces and allows the configuration of the RMON functions.

Utilities & Help

Chapter 5, Utilities & Help, provides the interface for system restarts, downloads, upload settings and controls for conducting a software upload. Chapter 7 Help introduces the Help menu.

SNMP Management

SNMP Management is run from industry standard platforms such as HP OpenView and SunNet Manager. Switch WSW-2620's embedded software supports SNMP, MIB-II, Repeater MIB and proprietary MIB. It also supports RMON Groups 1, 2, 3 and 9, Virtual LAN and Spanning Tree Protocol.

Chapter 2

Basic

The Basic menu page provides sub-menu items for viewing and configuring basic switch settings and management interface settings.

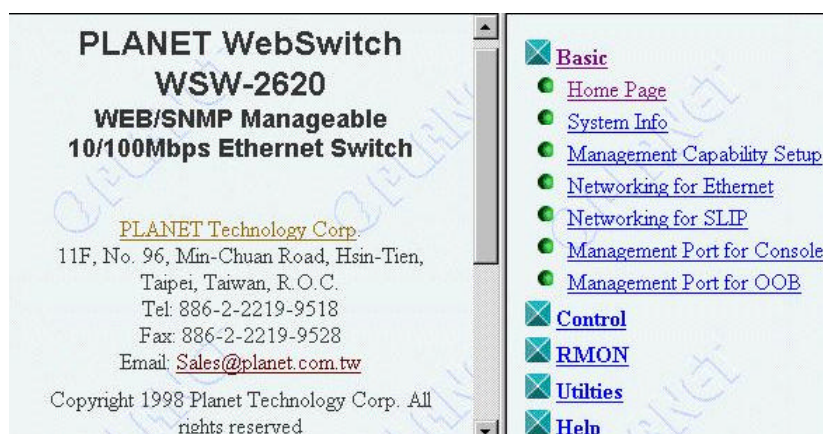


Figure 2.1 Basic Group Menu Items

Getting Started

The Web-Based Management program is easily started from your web browser by entering the IP address in the browser's Location entry field and pressing Enter. If you are using Microsoft Internet Explorer, please see **Chapter 5, Utilities & Help**. The Login Screen will be loaded and the correct User Name and Password must be entered to continue.

The default user name is “planet” and the password is “planet”. The Login Screen appears as in Figure 2.2.

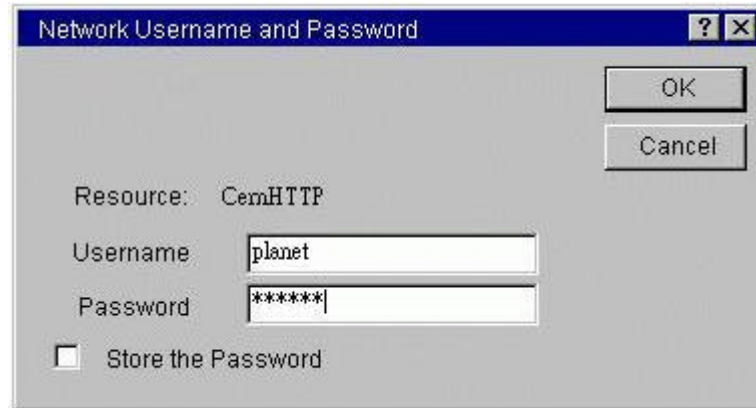


Figure 2.2 Login Screen

Click the OK button and the Home Page will be loaded.

Home Page



Figure 2.3 Home Page

The Switch's Home Page looks similar to Figure 2.3. The top window displays the Device Panel, the right window displays the Menu System, and the left window displays the Contents. The windows can be resized by dragging the frame between the windows with the mouse.

Menu items can be accessed with a mouse click on the menu word (not the icon). Clicking a menu item expands the menu to include the sub-menus. Clicking on another menu item collapses the previous expanded menu and expands the selected menu.

Clicking a sub-menu item loads the web page associated with the menu item. To unload the page, click Home Page from the Basic menu.

Figure 2.3 illustrates the Home Page as it first appears after entering the correct User Name and Password.

Trap Window

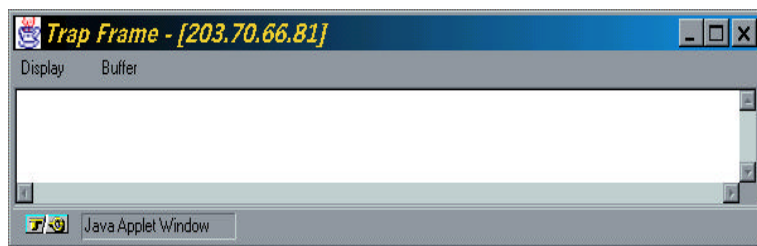


Figure 2.4 Trap Window

The Trap Window will show system alarm or event description. The Trap Window can be cleared or the buffer kept in the Trap Window can be deleted. If you close the Trap Window, it can be viewed again by left clicking on the switch graphic and selecting Trap Frame.

Note: Closing the Trap Frame panel does not delete the current information or disable the Trap Frame function.

Trap Frame Menu Items:

- **Display** Controls the display of trap messages.
 - **Pause** Discontinue displaying new trap messages.
 - **Continue** Resumes displaying new trap messages.
 - **Clear** Removes the current trap messages.
- **Buffer** Controls the trap messages in the buffer.
 - **Delete** Removes the current trap messages in the buffer.
 - **Dump** Moves the current trap messages in the buffer to the Trap Frame for display.

Device Panel



Figure 2.5 Active Device Panel

The Device Panel is active in the sense that it continuously updates to reflect the switch's status, actually simulating the Mini-Console. See "*Mini-Console*" in the User's Manual for more information.

The Device Panel also shows the 26 front panel ports and indicates the existing connections. If an optional module is installed, the ports will be represented under the PLANET label.

Port Icon



Figure 2.6 Port Icon

Connections are depicted with a white icon at the connected ports. A white frame around the port icon and an orange frame around the port indicator in the Mini-Console indicate that the port is disabled or partitioned.

In *Figure 2.6*, port 2 is shown as connected and functioning properly. Port 5 is shown as disabled by the administrator.

Pop-Up Menu



Clicking a port icon loads a pop-up menu. Clicking one of the pop-up menu items loads the corresponding information in the content window.

System Information

System Information	
System Description	PLANET WebSwitch-10/100Mbps Managed Switch
Product Version	1
BOOT ROM Version	1.01
System Software Version	2.11
Web-Pages Version	2.11
System Object ID	1.3.6.1.4.1.2263.103.2.3
System Up Time	3 day 19 hr 36 min 23 sec
System Manager	Web and SNMP
MIBs Supported	RFC1213, RFC1215, RFC1493, RFC1643, RFC1757 and proprietary MIB
System Contact	<input type="text"/>
System Name	PLANET WebSwitch-WSW-2620
System Location	<input type="text"/>
<input type="button" value="Update"/> <input type="button" value="Cancel"/>	

Figure 2.7 System Information

The second sub-menu under the Basic menu is System Info. The System Information screen displays the System Description, Product Version, BOOT ROM Version, System Software Version, Web Pages Version, System Object ID, System Up-Time and System Manager.

The System Name, System Contact and System Location can be entered, edited and updated by users with Read/Write privileges.

System Information	
System Contact	Information of up to 48 characters
System Name	A name of up to 48 characters
System Location	A location of up to 48 characters

Table 2.1 System Information

Clicking the Update button updates the system and re-loads the panel with the revised information.

Management Capability Setup

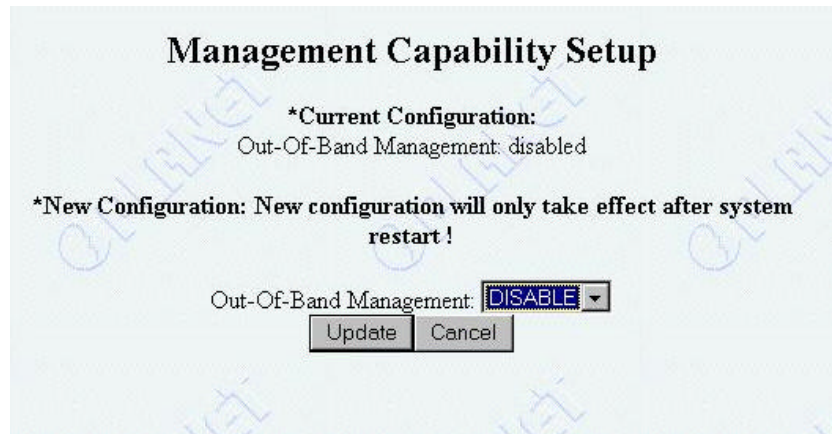


Figure 2.8 Management Capability Setup

The Management Capability Setup menu displays the current configuration for Out-of-Band management and allows you to enable or disable the function.

The Network Configuration – Ethernet Menu displays the current Ethernet configuration for the switch. This panel also allows you to change the settings for the switch's IP address, subnet mask and default gateway.

Network Configuration – Ethernet Menu Items:

- **Current Configuration (Read Only)**
 - **Interface Type** Displays the networking system to which the switch is currently connected.
 - **MAC Address** Displays the switch's current MAC address.
 - **IP Address** Displays the switch's current IP address.
 - **Subnet Mask** Displays the switch's current subnet mask.
 - **Default Gateway** Displays the switch's current default gateway.
- **New Configuration** These fields allow you to change the settings of the switch's Ethernet configuration. These values must be entered in dotted decimal format.
 - **IP Address** Allows you to assign a new IP address to the switch.
 - **Subnet Mask** Allows you to assign a new subnet mask to the switch.
 - **Default Gateway** Allows you to assign a new default gateway to the switch.

Be sure to select Update to save changes.

Note: The switch must be restarted in order for new configurations to take effect. Please see Chapter 4, Utilities, for more information.

Networking for SLIP

Network Configuration - SLIP Menu

*** Current Configuration**

IP Address	Subnet Mask	Baud Rate (bps)	Character Size (bits)	Parity	Stop Bit (bits)
0.0.0.0	0.0.0.0	19200	8	No	1

*** Restart Configuration:**
Restart Configuration will only take effect after system restart !

IP Address Subnet Mask

Figure 2.10 Networking for SLIP

The Network Configuration – SLIP Menu displays the current SLIP configuration for the switch. This panel also allows you to change the setting for the switch’s SLIP IP address and subnet mask assignment.

Network Configuration – SLIP Menu Items:

- **Current Configuration** Displays the switch’s current SLIP settings. These are read only items.
- **Restart Configuration** These fields allow you to change the settings of the switch’s SLIP assignment configuration. These values must be entered in dotted decimal format.
 - **IP Address** Allows you to assign a new SLIP assignment IP address to the switch.
 - **Subnet Mask** Allows you to assign a new SLIP assignment subnet mask to the switch.

Be sure to select Update to save changes.

Management Port for Console

Baud Rate	Character Size	Parity	Stop Bits
9600	8	NO	1

Figure 2.11 Management Port Configuration – Console Menu

The Management Port Configuration – Console Menu displays the current configuration for the switch's console management port. These items are read only and not configurable.

Management Port for OOB

* Current Configuration:			
Baud Rate (bps)	Character Size (bits)	Parity	Stop Bits(bits)
19200	8	No	1
* Restart Configuration:			
Restart Configuration will only take effect after system restart !			
Baud Rate:	19200	Update	Cancel

Figure 2.12 Management Port Configuration – Out-Of-Band Menu

The Management Port Configuration – Out-Of-Band Menu displays the current configuration for the Out-of-Band management interface for the switch. The most common Out-of-Band management tool is a Telnet session. This panel allows you to change the baud rate for the Out-of-Band connection.

Management Port Configuration – Out-Of-Band Menu Items:

-
- **Current Configuration** Displays the switch's current Out-of-Band management interface settings. These are read only items.
 - **Restart Configuration** This field allows you to change the baud rate of the switch's Out-of-Band management interface.
 - **Baud Rate** Allows you to select the baud rate for the switch's Out-of-Band management interface.

Be sure to select Update to save changes.

Note: The switch must be restarted in order for new configurations to take effect. Please see Chapter 4, Utilities, for more information.

Chapter 3

Control

The Control menu provides pages for setting up the Switch. The Control pages are divided into 7 main menus, Device, Port, Permanent Address, VLAN, STP, STP for Port and Trunk Group.

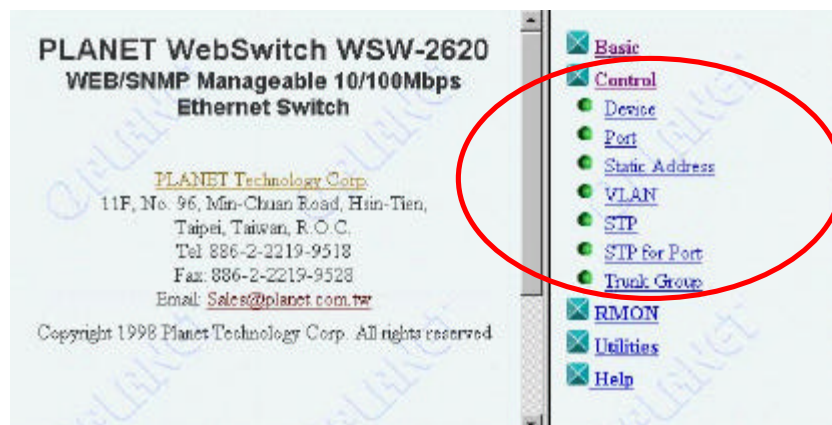


Figure 3.1 Control Group Menu Items

Device

The Switch Control/Status page displays information about the switch as well as five configurable fields.

Switch Control / Status			
Switch Board Version	1	Port Monitoring Function Status	DISABLE ▾
Max VLAN Groups	31	Mirrored Port ID	2 ▾
Max Trunk Groups	1	Monitoring Port ID	1 ▾
Learning Database Capacity	2048	Current Management VLAN ID	1
Number of Addresses Used	162	Restart Management VLAN ID(only take effect after restart)	1
Address Aging Time	300 seconds (10..1000000)		
Static Unicast Address Capacity	32		
Number of Configured Static Unicast Address	0		
Registered Group Address Capacity	32		
Number of Configured Group Address	0		

Figure 3.2 Switch Control/Status Page

Switch Control / Status panel read only items:

- **Switch Board Version:** Displays the switch board version.
- **Max. VLAN Group:** Displays the maximum number of VLANs that can be configured.
- **Max. Trunk Group:** Displays the maximum number of trunk groups that can be configured.
- **Learning Database Capability:** Displays the size of the database for learning MAC addresses (in Kilobytes).

- **Number of Learned Address:** Displays the maximum number of permanent MAC addresses that can be stored at any given time.
- **Permanent Unicast Address Capacity:** Displays the maximum number of unicast addresses that can be stored at any given time.
- **Number of Configured Permanent Unicast Address:** Displays the current number of permanent unicast addresses that are stored in the switch.
- **Registered Group Address Capacity:** Displays the maximum number of registered group addresses that can be stored at any given time.
- **Number of Configured Group Address:** Displays the current number of permanent configured group addresses that are stored in the switch.
- **Current Management VLAN ID:** Displays the VLAN ID number of the current management VLAN.

Switch Control / Status panel configurable items:

- **Port Mirror Function Status:** Enable or disable the Port Mirror Function. To have all frames destined to or sent from the mirrored port copied to the 'Monitoring Port', select ENABLE.
- **Mirrored Port ID:** Select the port number from which you want copies of all frames.
- **Monitoring Port ID:** Select the port number to which you want the copies from the mirrored port sent. This is the port to which you should attach your network analyzer. This port cannot be a member of the trunk group.
- **Restart Management VLAN ID:** Select the VLAN ID number which the system Network Management Unit is to join after the next switch restart.
- **Dynamic Entry Aging Time:** Set the time, in seconds, after which a learned MAC address is removed (Range: 1 to 65535 seconds).

Be sure to select Update to save changes.

Note: The switch must be restarted in order for new configurations to take effect. Please see Chapter 4, Utilities for more information.

Port

The Switch Port Control/Status page displays each of the switch's ports' settings. Selecting the Port ID Number and clicking the Select button allows you to view and configure each port's settings.

Switch Port Control / Status

Select Port ID:

Port ID: 1		Port Name: <input type="text"/>	
Status		State	
Link	Link Down	Admin. State	<input type="text" value="ENABLE"/>
Operation Status	Yes	Detection	<input type="text" value="ENABLE"/>
Auto Partition	Not Auto Part	Broadcasting Storm	Alarm Level <input type="text" value="Middle"/>
Auto Partition Reason		Alarm Action	<input type="text" value="partition"/>
Auto-Negotiation	Enable	Speed and Duplex	<input type="text" value="AUTO-NEGOTIATE"/>
Line Speed	10 Mbps	Transmit Pacing	<input type="text" value="DISABLE"/>
Duplex Mode	Half Duplex	Default VLAN ID	<input type="text" value="1"/> (1..4094)
Interface Type	10 Mbps TP	IEEE 802.1q Connection Type	<input type="text" value="Hybrid"/>
Capability	10 Mbps Half/Full Duplex Auto-Negotiation	Long Frame Handling	<input type="text" value="ENABLE"/>

Figure 3.3 Switch Port Control/Status

Switch Port Control / Status panel read only items:

- **Port ID:** Displays the port number for the current page.
- **Link:** Displays whether or not the current port has a device connected to it.
- **Operation Status:** Displays whether or not the current port is operational.

- **Auto Partition:** Displays whether or not the current port is auto partitioned.
- **Auto Partition Reason:** If the port is auto partitioned, the reason why will be displayed here.
- **Auto-Negotiation:** Displays whether or not the current port is set to auto negotiate speed and duplex mode.
- **Line Speed:** Displays the current port's line speed.
- **Duplex Mode:** Displays the current port's duplex mode.
- **Interface Type:** Displays the current port's interface type.
- **Capability:** Displays the current port's connection capabilities.

Switch Port Control / Status panel configurable items:

- **Select Port ID:** Select the port number which you want to view, then click the Select button.
- **Port Name:** Displays the name of the current port. The name can be edited by clicking on the field. You can use up to sixteen characters to designate a port name.
- **Admin State:** Enables or disables the current port. If Disable is selected, the port will be partitioned and the amber frame enclosing the port number on the Mini-Console will become lit.
- **Broadcasting Storm**
 - **Detection** Enable or disable broadcast storm detection. If you disable this setting, the **Alarm Level** and **Alarm Action** options will also be disabled.
 - **Alarm Level** Sets the broadcast storm alarm threshold. The settings are High (30%), Middle (20%) and Low (10%). The threshold percentage is calculated as:
$$(\text{broadcast packets}/\text{total packets}) * (\text{utilization})$$
 - **Alarm Action** Specify the action taken in the event of a broadcast storm alarm. The settings are:

- **send-trap-and-partition** Sends a trap message to the trap receivers and partitions the port. When the broadcast storm falls below the alarm level, the port is automatically enabled.
 - **send-trap** Sends a trap message to the trap receivers. The port is not partitioned.
 - **no-action** No action is taken.
 - **partition** Partitions the port. When the broadcast storm falls below the alarm level, the port is automatically enabled.
- **Speed and Duplex** Specify the speed and mode of the port. The settings are: AUTO-NEGOTIATE, 10MBPS Full-Duplex or 10MBPS Half-Duplex. For ports with 100 Mbps capability, you can also choose 100Mbps Full-Duplex or 100Mbps Half-Duplex.
 - **Transmit Pacing** Enables or disables the insertion of an extra amount of delay between transmission attempts under conditions of high network traffic. Transmit pacing reduces the switch's CPU utilization, reduces the number of retransmissions and reduces collision rates, which improves the switches overall performance under high traffic conditions.
 - **Default VLAN ID** Specifies the default VLAN ID. The range can be from 1 to 4095. In the IEEE 802.1q standard, this is the PVID.
 - **IEEE 802.1q Connection Type** Specifies the IEEE 802.1q connection type. The settings are:
 - **Access** Configures the port as an access link. An access link is a LAN segment that allows the multiplexing of one or more VLAN unaware devices into a port of a VLAN bridge.
 - **Hybrid** Configures the port as a hybrid link. A hybrid link allows VLAN unaware end stations to be added to a trunk link.
 - **Long Frame Handling** Enables or disables long frames to pass through the switch. Priority, VLAN, or tagged frames may require long frame handling. If this function is not enabled, long frames will be considered oversized and discarded. When enabled, the long packets will be included in the 1024-1518 octets packet size statistic.

Be sure to select Update to save changes.

Static Address

The Static Address menu items features four sub-menu items.

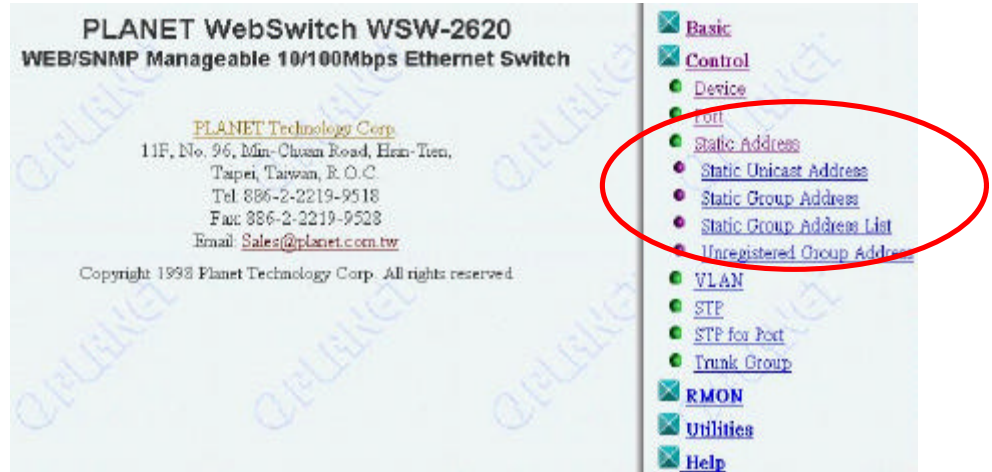


Figure 3.4 Static Address Menu Tree

The Permanent Address menu offers the following sub-menus:

- **Unicast Address** Assign static MAC addresses to individual ports.
- **Static Group Address** Assign group addresses to sets of ports.
- **Group Address List** Displays all configured static groups.
- **Unregistered Group Address** Specify which ports are to be forwarded for the unregistered static group address.

Unicast Address

Static Unicast Address

*** Create / Modify:**

MAC Address:

Port ID: VLAN ID:

Administration State:

MAC Address	VLAN ID	Port ID	Administration State	Operation Status
00-C0-02-11-25-80	1	1	Inactive	Inactive
00-C0-02-FE-EC-65	2	1	Active	Active

Figure 3.5 Permanent Unicast Address menu

Note: The MAC addresses must be specified in canonical (LSB) format.

Up to 16 static MAC addresses can be assigned in this menu. Once a MAC address is assigned to a port and the status is Active, the device associated with the MAC address can then only be connected to the assigned port. If the device is connected to a port other than the assigned port, a violation occurs and the packets are not sent.

When a MAC address is assigned to a port and its Admin Status is set to Yes, copies of all frames sent to that MAC address will be sent to the monitor port. When Monitored is set to "No", no copies of the packets are sent to the Monitor port.

Note: In order to capture the copies of the frames, you must have a network analyzer connected to the monitor port.

Follow these steps to add or edit a static MAC address:

1. Enter the MAC address.
2. Select a port ID number.

3. Select a VLAN ID. If you do not wish to designate a VLAN ID, enter 0 in this field.
4. Select the Administration State (enable or disable the port).
5. Click the Apply button.
6. Repeat these steps to assign static MAC addresses to other ports.

To delete an assigned static MAC address, enter the information above to identify the desired MAC address and click the Delete button.

Static Group Address

Static Group Address

Request to Create New Group Address:

Select to query:

Group Address (Name) and VLAN ID (Name) Pairs:

Group Address:	<input type="text" value="11"/> <input type="text" value="-22"/> <input type="text" value="-33"/> <input type="text" value="-05"/> <input type="text" value="-49"/> <input type="text" value="-47"/>	Group Address Name:	<input type="text" value="Account"/>
VLAN ID:	<input type="text" value="1"/>	Operation Status:	<input type="text" value="Active"/>
Administration State:	<input type="text" value="ENABLE"/>		

Member Setting

Port ID	1	2	3	4	5	6	7	8	9	10	11	12	13	
Member	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Port ID	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 3.6 Static Group Address

This menu allows you to assign a single MAC address and VLAN ID to a group of ports. This creates what is called a static group.

The following is a description of the settings:

- **Group Address** The MAC address of the specified group.
- **VLAN ID** The VLAN ID of the specified group. The VLAN ID range can be from 1 to 4094.
- **Group Address Name** The name of the specified group.
- **Administrative State** Enables or disables the current static group.
- **Member Setting** Select the ports which you want to assign to the given static group.

Follow these steps to configure the static group settings:

1. Click on the MAC Address select box to select a MAC address, then click the Select button. To create a new static group, click the New button.
2. Configure the settings as desired.
3. Click the Save button.
4. Repeat steps 1 through 3 to configure other static groups.

Follow these steps to delete a group address:

1. Click on the MAC Address select box to select a MAC address, then click the Select button.
2. Click the Delete button.

Group Address List



Static Group Address List

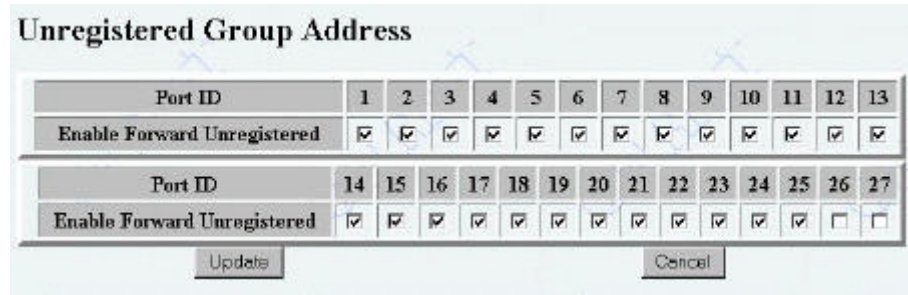
Refresh

Group Address	Group Name	VLAN ID	VLAN Name	Administration State	Operation Status
11-00-23-13-65-6a	Sales	2	Group 2	Active	Active
11-22-33-05-49-47	Account	1	Group 1	Active	Active

Figure 3.7 Group Address List Panel

The Group Address List provides information on all configured static group addresses configured in the switch. This is a read only panel. If recent changes are not displayed, click the Refresh button to view the updated information.

Unregistered Group Address



The image shows a web-based configuration panel titled "Unregistered Group Address". It contains two tables for configuring port settings. The first table covers ports 1 through 13, and the second table covers ports 14 through 27. Each table has a header row for "Port ID" and a row for "Enable Forward Unregistered" with checkboxes. In the first table, all checkboxes are checked. In the second table, checkboxes for ports 14-25 are checked, while ports 26 and 27 are unchecked. Below the tables are "Update" and "Cancel" buttons.

Port ID	1	2	3	4	5	6	7	8	9	10	11	12	13
Enable Forward Unregistered	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Port ID	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Enable Forward Unregistered	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Update Cancel

Figure 3.8 Unregistered Group Address Panel

This panel allows you to select which ports will receive packets that have a group address that has not been assigned to the switch. Click to check the corresponding ports to enable them to receive these packets. Be sure to click the Update button to save changes.

VLAN

The VLAN menu features four sub-menu items.

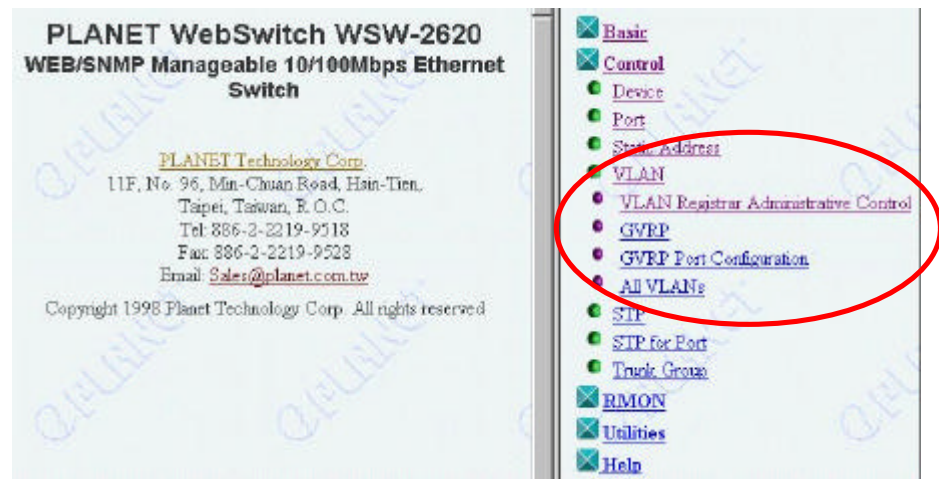


Figure 3.9 VLAN Menu Tree

The VLAN menu offers the following sub-menus:

- VLAN Registrar Administrative Control
- GVRP
- GVRP Port Configuration
- All VLANs

VLAN Registrar Administrative Control

VLAN Registrar Administrative Control

Request to Create New VLAN:

Select to query:
 VLAN ID (Name):

VLAN ID	<input type="text" value="1"/>	VLAN Name	<input type="text" value="Group 1"/>
Attribute	<input type="text" value="Static"/>	Port Members	(1234 5678 ...) xxxx xxxx xxxx xxxx xxxx xxxx xxx

Registrar Administrative Control

Port ID	1	2	3	4	5	6	7	8	9	10	11	12	13
Fixed	<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"/>
Normal													
Forbidden													

Port ID	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Fixed	<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"/>
Normal														
Forbidden														

Figure 3.10 VLAN Registrar Administrative Control

This panel allows you to configure up to 31 VLANs.

A VLAN shares packets only with the ports assigned to the given VLAN. This allows the user to create virtual workgroups within the WSW-2620 switch. For example, if you want to keep the information in the Accounting and Sales departments separate, you can assign only Accounting staff ports to the Accounting VLAN, and only the Sales staff ports to the Sales VLAN.

Note: All management connections requiring a switch port connection must be in VLAN 1.

Follow these steps to configure VLAN settings:

1. Select a VLAN from the VLAN ID list box and click the Select button. If you want to create a new VLAN, click the New button.
2. Edit the VLAN ID, VLAN Name and Attribute fields as needed. Note that the Port Members section is a read only summary of port assignments.
3. For each port, click the radio button to select Fixed, Normal or Forbidden to configure port membership for the given VLAN.
 - **Fixed** Creates a static VLAN membership.
 - **Normal** The specified port becomes a member of the VLAN only if it is dynamically assigned by the GVRP function.
 - **Forbidden** The specified port is not allowed to join the current VLAN, even if the GVRP function requests it to join.

Follow these steps to delete a VLAN:

1. Select the VLAN that you want to delete from the VLAN ID list box. Click the Select button.
2. Click the Delete button.

GVRP

GVRP Configuration

System GVRP Capability: ENABLE

NOTE: Leave All Period > Leave Time > 2 * Join Time

Join Time: 20 centi-seconds (Default 20)
(Range 10...200)

Leave Time: 60 centi-seconds (Default 60)
(Range 30...600)

Leave All Time: 1000 centi-seconds (Default 1000) (Range 200...6000)

Update Cancel

Figure 3.11 GVRP Configuration

The GARP VLAN Registration Protocol (GVRP) provides a mechanism for the dynamic maintenance of the contents of Dynamic VLAN Registration Entries for each VLAN. The GVRP function also propagates information for each VLAN to other bridges.

This information allows GVRP-aware devices to dynamically establish and update their knowledge of the set of VLANs that currently have members, and through which ports those members are reached.

The GVRP function can be enabled or disabled per switch and per port basis. The dynamic registration and de-registration feature will not be available once the GVRP function is disabled.


This panel allows you to enable or disable GVRP and set the join and leave times.

System GVRP Settings:

- **Join Time** The range can be between 10 and 200 centi-seconds.
- **Leave Time** The range can be between 30 and 600 centi-seconds.

- **Leave All Time** The range can be between 200 and 6000 centi-seconds.
Be sure to click the Update button to save changes.

GVRP Port Configuration



The screenshot shows a window titled "GVRP Port Configuration". It contains two tables of port IDs and their enablement status. The first table lists ports 1 through 13, and the second table lists ports 14 through 27. Each port has a checkbox next to it, all of which are checked. Below the tables are two buttons: "Update" and "Cancel".

Port ID	1	2	3	4	5	6	7	8	9	10	11	12	13
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"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Port ID	14	15	16	17	18	19	20	21	22	23	24	25	26	27
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"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Update Cancel

Figure 3.12 GVRP Port Configuration Panel

This menu allows you to enable or disable GVRP for each port.

To enable GVRP for a port, click to check the corresponding port number box.
To disable GVRP for a port, click to uncheck the corresponding port number box.

Be sure to click the Update button to save changes.

All VLANs

All VLAN Information

VLAN ID	VLAN Name	Attribute	Bit-Map of Port Members (1234 5678 ...)
1	Group 1	STATIC	xxxx xxxx xxxx xxxx xxxx xxxx xxx
2	Group 2	STATIC	xxx- - - - - - - - - - - - - - - -

Figure 3.13 All VLAN Information Panel

This read only panel displays current information on all configured VLANs. Click the Refresh button to view recent changes in VLAN configuration.

STP

Spanning Tree Protocol Control

	Configuration
STP Specification	IEEE 802.1D
STP Base MAC Address	00-E0-95-01-13-32
STP Topology Change Count	1
STP Time Since Topology Change	3 day 20 hr 35 min 1 sec
STP Designated Root	8000:00E095011332
STP Root Port	0
STP Root Cost	0
STP Max Age	2000 (1/100 secs)
STP Hello Time	200 (1/100 secs)
STP Forward Delay	1500 (1/100 secs)
STP Hold Time	100 (1/100 secs)
STP Operation Mode	ENABLE ▾
STP Bridge Priority	32768 (0.65535)
STP Bridge Max Age	20 sec(s) (6.40)
STP Bridge Hello Time	2 sec(s) (1.10)
STP Bridge Forward Delay	15 sec(s) (4.30)
Role of STP Bridge	Root Bridge

Figure 3.14 Spanning Tree Protocol Control Panel

This menu allows you to monitor and configure the switch's STP (Spanning Tree Protocol) system. The STP system prevents network looping by

reconfiguring the network topology when detecting a potential loop. The switch uses one STP system with a single MAC address.

The settings are defined as:

- **STP Specification** Read only. States the IEEE STP specification used.
- **STP Base MAC Address** Read only. States the MAC address used by STP to identify the switch.
- **STP Topology Change Count** Read only. States the number of changes in the network topology since the last switch reset or initialization.
- **STP Time Since Topology Changed** Read only. States the time elapsed since the last network topology change.
- **STP Designated Root** Read only. States the root bridge's bridge identifier.
- **STP Root Port** Read only. States the switch's root port.
- **STP Root Cost** Read only. States the switch to root bridge path cost.
- **STP Max. Age** The maximum age of STP information learned from the network on any port before it is discarded.
- **STP Hello Time** The amount of time between the transmission of PDUs by this node on any port when it is the root of the spanning tree or trying to become so.
- **STP Forward Delay** This time value controls how much time is used when a port changes its spanning state while moving towards the forwarding state. Before proceeding to the forwarding state, this value determines how long the port stays in both the listening and learning states. This value is also used to age all dynamic entries in the forwarding database when a topology change has been detected and is underway.
- **STP Hold Time** Read only. States the amount of time during which no more than 2 BPDUs may be transmitted.
- **STP Operation Mode** Enable or disable the STP function.
- **STP Bridge Priority** Specifies the priority of the switch. A low priority (smaller number value) increases the likelihood that the switch will become the STP root bridge. A high priority (larger number value)

decreases the likelihood that the switch will become the STP root bridge.

- **STP Bridge Max. Age** Specifies, in seconds, the amount of time that all bridges in the spanning tree will use for max. age when this bridge is acting as the root for the spanning tree. The setting range is between 6 and 40 seconds.
- **STP Bridge Hello Time** Specifies, in seconds, the amount of time that all bridges in the spanning tree will use for hello time when this bridge is acting as the root for the spanning tree. The setting range is between 1 and 10 seconds.
- **STP Bridge Forward Delay** Specifies, in seconds, the amount of time that all bridges in the spanning tree will use for forward delay when this bridge is acting as the root for the spanning tree. The setting range is between 4 and 30 seconds.
- **Role of STP Bridge** Read only. States whether or not the STP bridge is acting as the root bridge.

Be sure to click the Update button to save any changes.

STP for Port

Spanning Tree Protocol Control for Port

Select Port ID:

Port ID: [1]		Port Name: []	
Item	Value	Item	Value
STP Port ID	81:1	STP Port State	Disable
Designated Root	800000E095011332		
Designated Cost	0	STP Port Enable Status	ENABLE ▾
Designated Bridge	800000E095011332	Join STP	ENABLE ▾
Designated Port	81:01	Priority	129 (0.255)
Forward Transition Count	0	Path Cost	100 (1.65535)
Role of STP Port	Disconnected Port		

Figure 3.15 Spanning Tree Protocol Control for Port

This menu allows you to monitor and configure the STP settings for each of the switch's ports.

The settings are defined as:

- **Port ID** Read only. States which port the settings are for. Scroll through the ports by selecting PREV PORT or NEXT PORT.
- **STP Port ID** Read only. States the designated bridge port ID for the current port's VLAN.
- **Designated Root** Read only. States the bridge identifier of the root bridge.
- **Designated Cost** Read only. States the path cost of the designated port of the segment connected to the given port.
- **Designated Bridge** Read only. States the current port's designated bridge's bridge identifier.
- **Designated Port** Read only. States the ID of the designated bridge port for the current port's segment.
- **Forward Transitions Count** Read only. States how many times the current port has switched between learning and forwarding modes.
- **Role of STP Port** Read only. States the current status of the given port.
- **STP Port State** Read only. State whether the port is enabled or disabled.
- **STP Port Enable Status** Enable or disable the current STP port.
- **Join STP** Enable or disable joining of STP. Selecting enable allows the port to join STP.
- **Priority** Specify the priority of the port. A low priority (smaller number value) increases the likelihood that the port will become the STP root port. A high priority (larger number value) decreases the likelihood that the port will become the STP root port.
- **Path Cost** Specify the path cost of the port toward the spanning tree root.

Be sure to click the Update button to save any changes.

Trunk Group

Trunk Group Configuration

Port ID	25	26	27
Join	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 3.16 Trunk Group Configuration Panel

This menu allows you to monitor and configure the switch's Trunk Groups.

The switch provides a Port Trunking algorithm that supports two or more 100 Mbps ports to be connected in parallel between switches, which increases the overall bandwidth between the devices. Each trunk group uses a single STP port instance (STP port 28). However, the port control state is separate.

Click to select a trunk group from the Trunk Group Name list box. Click to select the ports which you want to join the given trunk group.

Chapter 4

RMON

The Remote Monitoring MIB (RMON) function allows you to monitor LANs remotely. The RMON menu provides the two sub menus Configuration and Information.



Figure 4.1 The RMON Menu Tree

Configuration

The RMON Configuration menu contains four sub menus for configuring the RMON function.



Figure 4.2 The RMON Configuration Menu Tree

Statistics Grp

Index	Data Source	Owner	Status
1	Switch Port 1	MONITOR	valid
2	Switch Port 2	MONITOR	valid
3	Switch Port 3	MONITOR	valid
4	Switch Port 4	MONITOR	valid
5	Switch Port 5	MONITOR	valid
6	Switch Port 6	MONITOR	valid
7	Switch Port 7	MONITOR	valid
8	Switch Port 8	MONITOR	valid
9	Switch Port 9	MONITOR	valid
10	Switch Port 10	MONITOR	valid
11	Switch Port 11	MONITOR	valid
12	Switch Port 12	MONITOR	valid
13	Switch Port 13	MONITOR	valid
14	Switch Port 14	MONITOR	valid
15	Switch Port 15	MONITOR	valid
16	Switch Port 16	MONITOR	valid
17	Switch Port 17	MONITOR	valid
18	Switch Port 18	MONITOR	valid
19	Switch Port 19	MONITOR	valid
20	Switch Port 20	MONITOR	valid
21	Switch Port 21	MONITOR	valid
22	Switch Port 22	MONITOR	valid
23	Switch Port 23	MONITOR	valid
24	Switch Port 24	MONITOR	valid
25	Switch Port 25	MONITOR	valid
26	Switch Port 26	MONITOR	valid
27	Switch Port 27	MONITOR	valid

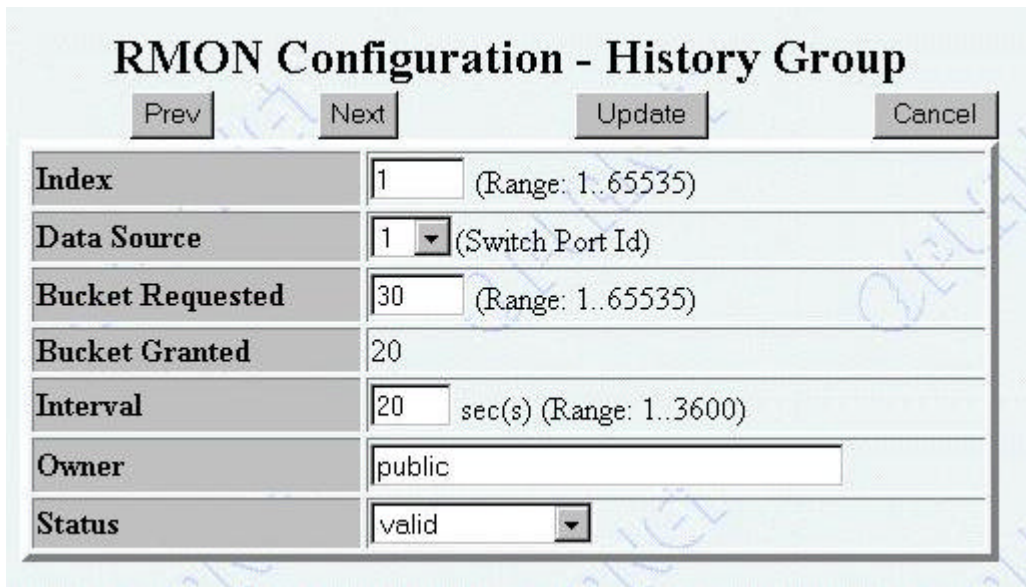
Figure 4.3 The RMON Configuration – Statistics Group Panel

The RMON Configuration - Statistic Group page displays switch ports' current settings, displayed as Index, Data Source, Owner and Status. This is a read only page.

The settings are defined as:

- **Index** Displays the switch ports index from 1~27.
- **Data Source** Displays the data source as the switch ports 1~27.
- **Owner** Displays the owner of the statistics.
- **Status** Displays the current status of each port as Valid, Create Request, Under Creation, or Invalid.

History Grp



RMON Configuration - History Group	
Index	1 (Range: 1..65535)
Data Source	1 (Switch Port Id)
Bucket Requested	30 (Range: 1..65535)
Bucket Granted	20
Interval	20 sec(s) (Range: 1..3600)
Owner	public
Status	valid

Figure 4.4 RMON Configuration – History Group Page

The History Group panel provides you with a means to gather statistical samples over a period of time. The statistical samples are recorded for analysis at a later time by viewing the RMON Information – History Information panel.

Use this panel to configure the interval and duration of time over which the samples will be taken.

All the field values must be entered before an update can be made. Clicking the Update button with any fields left blank results in an Error page being loaded.

The settings are defined as:

- **Index** Assign a numeric value to identify the sample set. The value range can be from 1 to 65535. The value must be unique. Not to be confused with Data Source Index.
- **Data Source** Select the switch port ID number from which you want the sample set to be taken.
- **Bucket Requested** Assign the number of buckets (samples) that you want to collect and store. The range can be from 1 to 65535.
- **Bucket Granted** The number of buckets granted by the switch. At times the number of buckets granted will fluctuate, based on available system resources.
- **Interval** Assign the number of seconds over which the data is sampled for each bucket. The range can be from 1 to 3600 (1 hour) seconds. The default is 1800 seconds.
- **Owner** You can enter up to 12 characters to identify who is collecting this information.
- **Status** Allows you to select the status of the current history group.
 - **Valid** Select Valid when an entry is completed, then click the Update button to start taking the samples.
 - **underCreation** Select underCreation if you have not completed an entry and want to come back to it. Selecting this option will not allow the entry to start taking samples. You must have an Index number entered to use this function.
 - **Invalid** Select Invalid to clear the entry.

Click the Prev or Next buttons to scroll through the Index of configured groups. Be sure to click the Update button to save any changes.

Alarm Grp

RMON Configuration - Alarm Group			
Prev	Next	Update	Cancel
Index	2 (Range: 1..65535)	Interval	20 sec(s)
Port Id	1 (Switch Port Id)		
Counter	Collisions		
Sample Type	absoluteValue		
Value	0		
Startup Alarm	risingAlarm		
Rising Threshold	20	Rising Event Index	2 (0..65535)
Falling Threshold	0	Falling Event Index	0 (0..65535)
Owner	public		
Status	valid		

Figure 4.5 RMON Configuration – Alarm Panel

This panel is used to track unusual events. You can set the RMON alarms at either absolute or delta (based on change) thresholds. When conditions occur outside of the parameters set by the thresholds, an *event* takes place. A rising threshold sets the upper level at which an event is triggered. A falling threshold sets the lower level at which an event is triggered. An alarm will be triggered by an event. You can use the Event Group Panel to configure actions to be taken when an alarm occurs.

The settings for this panel are defined as:

- **Index** An integer to uniquely identify an entry in the alarm group.
- **Interval** The interval in seconds over which the data is sampled and compared with the rising and falling thresholds.
- **Port ID** Switch Port ID number.
- **Counter** Select the counter you wish to track. If Not Support is chosen, the Counter defaults to Octets.
- **Sample Type** Select the sample type.

- **absoluteValue** Stores the sample as a value in direct relation to the given threshold level.
- **deltaValue** Stores the sample as a value of change from the last sample, as compared with the threshold level. This is done by taking the value of the last sample, subtracting it from the current value, and comparing it to the threshold value.
- **Value** The value of the statistic during the last sampling period.
- **Startup Alarm** Select the event which will first trigger an event.
 - **risingAlarm** Triggers an event when the rising threshold is crossed first.
 - **fallingAlarm** Triggers an event when the falling threshold is crossed first.
 - **risingOrFallingAlarm** Triggers an event when either the rising or falling thresholds are crossed.
- **Rising Threshold** Configures the rising threshold for the sampled statistic. If the last sample value was less than this threshold and the current sample value is greater than or equal to this threshold, a single event is triggered. Another event of this type will not be triggered until another sample value is less than or equal to the falling threshold.
- **Rising Event Index** This is used to assign a number (an index) to a rising event. This index is used to track the rising event in the RMON Configuration – Event Group panel. If you enter 0, no event is generated when this threshold is met or exceeded.
- **Falling Threshold** Configures the falling threshold for the sampled statistic. If the last sample value was greater than this threshold and the current sample value is less than or equal to this threshold, a single event is triggered. Another event of this type will not be triggered until another sample value is greater than or equal to the rising threshold.
- **Falling Event Index** This is used to assign a number (an index) to a falling event. This index is used to track the falling event in the RMON Configuration – Event Group panel. If you enter 0, no event is generated when this threshold is met or gone below.
- **Owner** You can enter up to 12 characters to identify who is collecting this information.
- **Status** Allows you to select the status of the current alarm group.

- **Valid** Select Valid when an entry is completed, then click the Update button to start taking the samples.
- **underCreation** Select underCreation if you have not completed an entry and want to come back to it. Selecting this option will not allow the entry to start taking samples. You must have an Index number entered to use this function.
- **Invalid** Select Invalid to clear the entry.

Click the Prev or Next buttons to scroll through the Index of configured groups. Be sure to click the Update button to save any changes.

Event Grp



RMON Configuration - Event Group	
Index	2 (1..65535)
Description	Record Collision
Type	log-and-trap
Community	public
Last Time Sent	0 day 0 hr 0 min 0 sec
Owner	Manager
Status	valid

Figure 4.6 RMON Configuration – Event Group Panel

This panel can create event log entries and send SNMP trap messages to the management workstation.

The settings for this panel are defined as:

- **Index** An integer to uniquely identify an entry in the event group. To configure an event group to correspond with a rising or falling event alarm, the index must be identical to the Rising Event Index or Falling Event Index configured in the RMON Configuration – Alarm Group panel.
- **Description** You can enter a brief description of the event.
- **Type** This allows you to configure an action to be taken when the given event occurs.
 - **none** No action taken.
 - **log** An entry is placed in the log table each time the given event occurs.
 - **snmp-trap** An SNMP trap message is sent to the configured management stations each time the given event occurs.

- **log-and-trap** An entry is placed in the log table and an SNMP trap message is sent to the configured management stations each time the given event occurs.
- **Community** Enter the octet string that specifies the SNMP community to which an SNMP trap message is to be sent.
- **Last Time Sent** The System Up Time at which the last SNMP trap message was sent.
- **Owner** You can enter up to 12 characters to identify who is collecting this information.
- **Status** Allows you to select the status of the current event group.
 - **Valid** Select Valid when an entry is completed, then click the Update button to start taking the samples.
 - **underCreation** Select underCreation if you have not completed an entry and want to come back to it. Selecting this option will not allow the entry to start taking samples. You must have an Index number entered to use this function.
 - **Invalid** Select Invalid to clear the entry.

Click the Prev or Next buttons to scroll through the Index of configured groups. Be sure to click the Update button to save any changes.

Information

The RMON Information menu contains three sub menus for viewing RMON information.



Figure 4.7 The RMON Information Menu Tree

Statistics

RMON Information - Statistics			
Select by Index <input type="text" value="25"/>		<input type="button" value="Select"/> <input type="button" value="Cancel"/>	
<input type="button" value="Refresh"/>			
Index: 25		Data Source: Switch Port 25	
Owner: MONITOR		Status: valid	
Octets	726	CRC Alignment Errors	0
Packets	10	Undersize Packets	0
Broadcast Packets	2	Oversize Packets	0
Multicast Packets	6	Fragments	0
Packet Size 64	6	Jabbers	0
Packet Size 65 to 127	4	Collisions	0
Packet Size 128 to 255	0	Drop Events	0
Packet Size 256 to 511	0		
Packet Size 512 to 1023	0		
Packet Size 1024 to 1518	0		

Figure 4.8 RMON Information – Statistics Panel

This panel provides traffic and error statistics counters for each port. This information is read only.

To view the statistics for a port, select the desired port number in the Select by Index list box and click the Select Button. Click the Refresh button to view recent information.

The settings for this panel are defined as:

- **Octets** A whole number representing the total readable octets received by the port.
- **CRC Alignment Errors** The total CRC or alignment error frames within the proper size (64-1518 octets) received by the port.
- **Packets** Total number of packets received by the port, including bad packets, broadcast packets and multicast packets.

- **Undersize Packets** The number of packets received that were less than 64 octets long.
- **Broadcast Packets** The total number of packets transmitted that were directed to the broadcast address.
- **Oversize Packets** The number of packets received that were longer than 1518 octets. If the LONG FRAME mode is selected, only those packets longer than 1536 octets will be counted.
- **Multicast Packets** The number of packets received that were directed to the Multicast Address.
- **Fragments** The number of packets received which were longer than 1518 octets and had a FCS or alignment error.
- **Packet Size 64** The number of packets received that were 64 octets.
- **Jabbers** The number of packets received which were less than 64 octets and had a FCS or alignment error.
- **Packet Size 65 to 127** The number of packets received that were between 65 and 127 octets.
- **Collisions** The number of collisions.
- **Packet Size 128 to 255** The number of packets received that were between 128 and 255 octets.
- **Drop Events** The number of events in which packets were dropped by the monitor due to lack of resources.
- **Packet Size 256 to 511** The number of packets received that were between 256 and 511 octets.
- **Packet Size 512 to 1023** The number of packets received that were between 512 and 1023 octets.
- **Packet Size 1024 to 1518** The number of packets received that were between 1024 to 1518 octets.

History

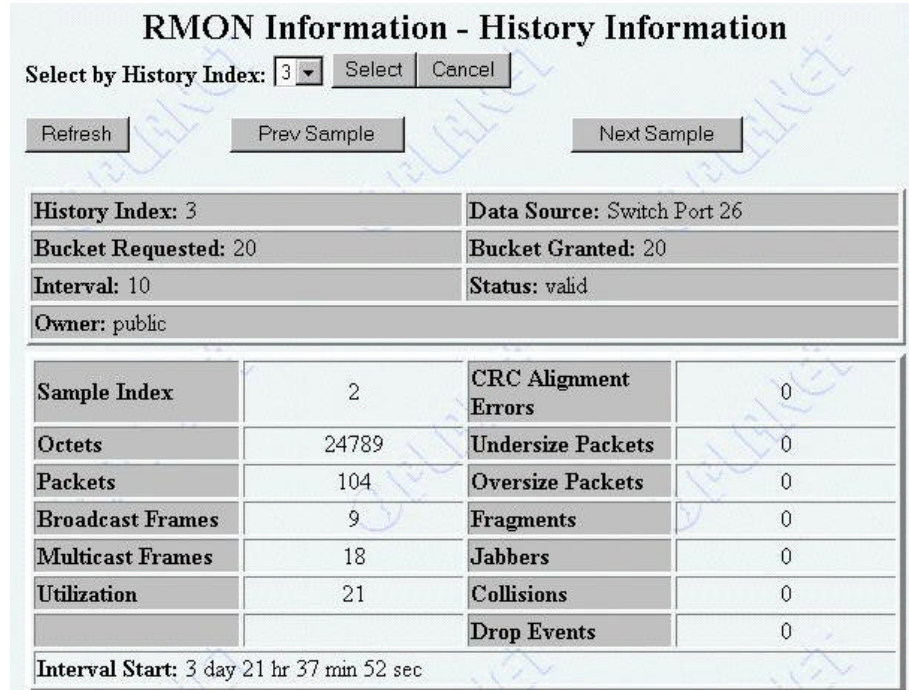


Figure 4.9 RMON Information – History Information Panel

This panel provides you with the information gathered by the RMON Configuration – History Group panel. The information is the result of the buckets of data gathered at specified intervals. A bucket is a data set collected over a specified period of time. The number of buckets granted is dependent on the request size and available switch resources.

To view an index, select a history index in the Select by History Index list box and click the Select button. Within the history index, you can view the samples taken by clicking the Prev Sample or Next Sample buttons. To view recent information, click the Refresh button.

- **History Index** The numeric value assigned to identify the sample set.

- **Data Source** The switch port ID number from which the sample set was taken.
- **Bucket Requested** The number of buckets (samples) that were requested to collect and store history data.
- **Bucket Granted** The number of buckets granted by the switch. At times the number of buckets granted will fluctuate, based on available system resources.
- **Interval** The number of seconds over which the data was sampled for each bucket.
- **Status** States the status of the current history group.
 - **Valid** Indicates when an entry is completed.
 - **underCreation** Indicates that the history group is still taking samples.
 - **Invalid** Indicates that the history group is not configured correctly.
- **Owner** States who requested the information.
- **Sample Index** Indicates which sample within the history index is currently being viewed.
- **CRC Alignment Errors** The total CRC or alignment error frames within the proper size (64-1518 octets) received by the port.
- **Octets** A whole number representing the total readable octets received by the port.
- **Undersize Packets** The number of packets received that were less than 64 octets long.
- **Packets** Total number of packets received by the port, including bad packets, broadcast packets and multicast packets.
- **Oversize Packets** The number of packets received that were longer than 1518 octets. If the LONG FRAME mode is selected, only those packets longer than 1536 octets will be counted.
- **Broadcast Frames** The total number of frames transmitted that were directed to the broadcast address.
- **Fragments** The number of packets received which were longer than 1518 octets and had a FCS or alignment error.

- **Multicast Frames** The number of frames received that were directed to the Multicast Address.
- **Jabbers** The number of packets received which were less than 64 octets and had a FCS or alignment error.
- **Utilization** An estimate of this history index's mean network utilization during the sample period.
- **Collisions** The number of collisions.
- **Drop Events** The number of events in which packets were dropped by the monitor due to lack of resources.

Event

RMON Information - Event Group

Select by Event Index:

Event Index: 2		Event Type: log-and-trap
Community: public		Status: valid
Owner: Manager		
Description: Record Collision		

Log Index	Log Time	Log Description
1	3 day 22 hr 8 min 57 sec	rising-alarm in Pkts65to127Octets of segment 26, alarmIndex = 4 alarmSampleType = absoluteValue alarmRisingThreshold = 20 alarmValue = 865645
2	3 day 22 hr 9 min 33 sec	rising-alarm in Pkts65to127Octets of segment 26, alarmIndex = 4 alarmSampleType = absoluteValue alarmRisingThreshold = 20 alarmValue = 865747

Figure 4.10 RMON Information – Event Group Panel

This panel provides you with the information gathered by the RMON Configuration – Event Group panel. The information is dependent on what was configured in the Type (of action to be taken in the occurrence of an event) list box.

To view an index, select an event index in the Select by Event Index list box and click the Select button. The information will then be displayed in the log table. To view recent information, click the Refresh button.

In the log table, the Log Description will be dependent on what log descriptions were configured in the RMON Configuration – Event Group panel.

Chapter 5

Utilities and Help

The Utilities menu provides you with restart, download and upload utilities.



Figure 5.1 The Utilities Menu Tree

System Restart



Figure 5.2 The System Restart Panel

Click a radio button to select either Warm or Cold restart. Click the Confirm button to initiate the restart.

System Download

System Download

BootP Request:

File Download Request: TFTP Server IP Address

Boot ROM Code Download:

File Name:

Configuration File Download:

File Name:

Web-Pages Database Information Download:

File Name:

System Software Download:

File Name:

Switch Port ID for Communication with TFTP Server:

Figure 5.3 System Download Panel

The System Download Panel is used to configure the setting to download new system software.

System Download Notes

The system software can be downloaded from a remote computer that is TFTP server enabled and connected to the network.

If your network has a properly configured Bootp server, select Bootp Request.

If your network does not have a properly configured Bootp server, do not select Bootp Request. In this case, you can select Boot ROM Code Download to download boot ROM code from the software.

To execute a download, you must enter the IP address of a remote computer that is TFTP server enabled in the TFTP Server IP Address field.

Note: Before executing a system software download, be sure that the TFTP server on the remote computer is enabled.

Executing a System Download

Follow these steps to perform a system software download:

1. Copy the switch software files to a computer's C drive. Be sure that the computer you are using is connected to the switch and that the TFTP server is enabled.
2. In the System Download panel, if you want to use your network's Bootp server, select the Bootp Request option by placing an X in the Bootp Request check box. If you do not want to use your network's Bootp server, or if your network does not have an enabled Bootp server, be sure that the Bootp Request option is not selected.
3. Click on the TFTP Server IP Address field. In this field, enter the IP address of the computer that contains the software files.
4. If you want to download new Boot ROM code, click to check the Boot ROM Code Download check box. Click on File Name and enter the complete file path and name.
5. If you want to download a Web-Page update, click to check the Web-Pages Database Information Download check box. Click on File Name and enter the complete file path and name.
6. If you want to download System Software, click to check the System Software Download check box. Click on File Name and enter the complete file path and name.
7. In the **Switch Port ID for Communication with TFTP Server** field, select the communication port that you want to use to perform the upload. Remember that this port must be in VLAN 1.

Note: The switch port used to communicate with the TFTP server enabled computer must be in VLAN #1.

8. Click Update.
9. In the Utilities menu, select System Restart.
10. Select the **Cold** radio button under Restart Mode, then click **Confirm**. The switch will now execute the software download. This process will

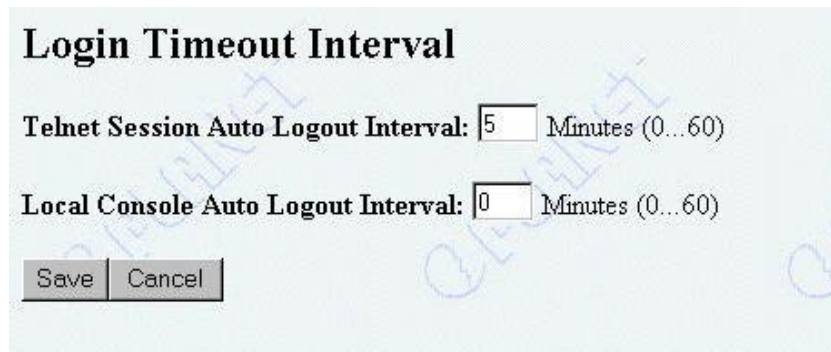
take several minutes. You will need to re-establish your connection with Web-Based management after the restart.

11. At this point, you should conduct a ping from a networked terminal to ensure that the new software is configured properly.

Note: If the ping is timed out, simply plug your Ethernet connection into a different port and conduct another ping.

12. Your new software is now installed and functioning properly. You can now re-establish a connection with your browser.

Login Timeout Interval



Login Timeout Interval

Telnet Session Auto Logout Interval: Minutes (0...60)

Local Console Auto Logout Interval: Minutes (0...60)

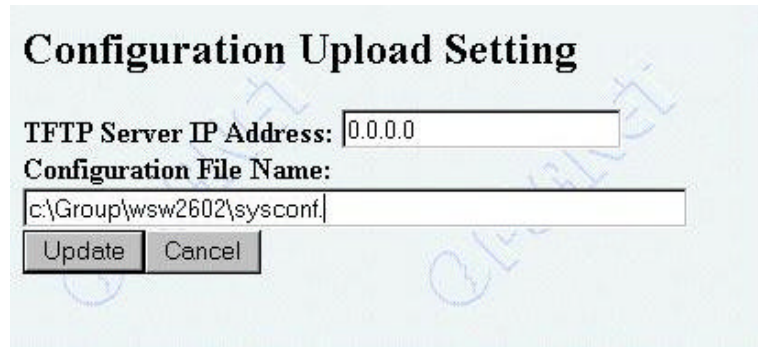
Figure 5.4 Login Timeout Interval Panel

The Login Timeout Interval panel allows you to set a time after which an inactive management session connection will be automatically disabled.

Setting the interval to 0 will disable the timeout function, which means an inactive management session connection will not be automatically disabled.

Be sure to click the Save button to save any changes.

Configuration Upload Setting



Configuration Upload Setting

TFTP Server IP Address:

Configuration File Name:

Figure 5.5 Configuration Upload Setting Panel

This panel allows you to specify the TFTP server IP address and configure a file name for a system configuration upload. To perform the configuration upload, use the Configuration Upload Request/Status panel.

Be sure to select Update to save any changes.

Configuration Upload Request/Status



Configuration Upload Request/Status

TFTP Server IP Address: 203.70.249.200
Configuration File Name: c:\Group\wsw2602\sysconf

Current State: Completed
Time Elapsed: 0 Seconds
Upload Status: No-Error

NOTE: If your browser support HTML 3 or above, then this page will auto-refreshed.
Otherwise, "Refresh" button should be pressed to see the status of upload.

Submit Abort Refresh

Figure 5.6 Configuration Upload Request/Status Panel

This menu allows you to execute the configuration file upload from the TFTP server and monitor the status of the upload.

Click the Submit button to start the upload.

Monitoring the Upload Status

- **Current State** Displays the state of the upload as In-Progress, Completed, Wait-Abort or Aborted.
- **Time Elapsed** Displays the time remaining to complete the upload.
- **Upload Status** Displays the result of an upload attempt as No-Error, No-Such-File, Access-Violation, Disk Full or Timeout.

Help

The Help menu page displays important information when Internet Explorer is used as the browser application to run the Switch WSW-2620's web software.

Content

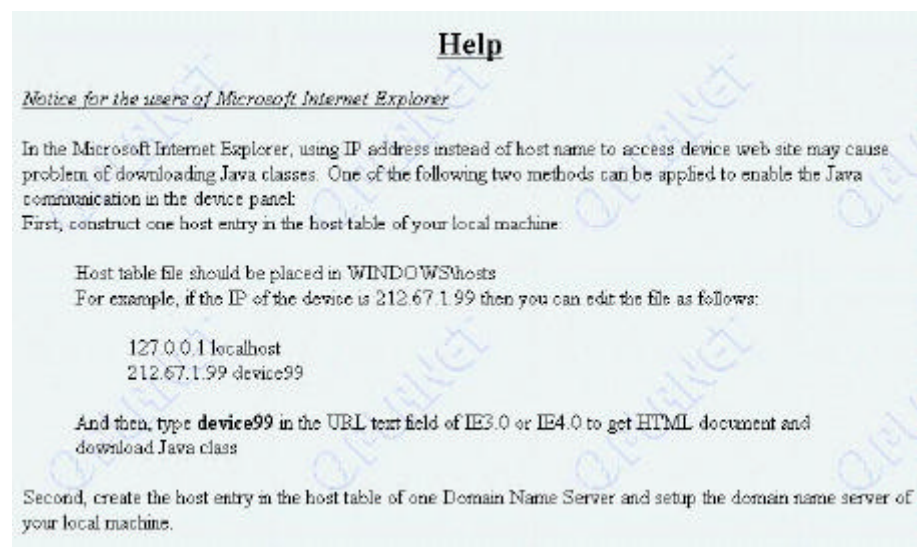


Figure 5.7 Help Panel

When Internet Explorer 3.0/4.0 is used to run the web software it may have problems running the Java, used in the dynamic device panels that dynamically update the information. Follow the instructions in the Content page to enable Java downloads.