



Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for ZYXEL GS-3012F. You'll find the answers to all your questions on the ZYXEL GS-3012F in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual ZYXEL GS-3012F
User guide ZYXEL GS-3012F
Operating instructions ZYXEL GS-3012F
Instructions for use ZYXEL GS-3012F
Instruction manual ZYXEL GS-3012F

GS-3012F/3012

Layer 2+ Gigabit Switch

User's Guide

Version 3.80
7/2007
Edition 1

DEFAULT LOGIN

IP Address	http://192.168.1.1
User Name	admin
Password	1234

ZyXEL
www.zyxel.com



[You're reading an excerpt. Click here to read official ZYXEL GS-3012F user guide](http://yourpdfguides.com/dref/3685406)
<http://yourpdfguides.com/dref/3685406>

Manual abstract:

· *Web Configurator Online Help* Embedded web help for descriptions of individual screens and supplementary information. It is recommended you use the web configurator to configure the Switch. · *Supporting Disk* Refer to the included CD for support documents. · *ZyXEL Web Site* Please refer to www.zyxel.com for additional support documentation and product certifications. *User Guide Feedback* Help us help you. Send all User Guide-related comments, questions or suggestions for improvement to the following address, or use e-mail instead. Thank you! The Technical Writing Team, ZyXEL Communications Corp., 6 Innovation Road II, Science-Based Industrial Park, Hsinchu, 300, Taiwan.

E-mail: techwriters@zyxel.com.tw GS-3012/GS-3012F User's Guide 3 Document Conventions Document Conventions Warnings and Notes These are how warnings and notes are shown in this User's Guide. Warnings tell you about things that could harm you or your device. Notes tell you other important information (for example, other things you may need to configure or helpful tips) or recommendations.

Syntax Conventions · The GS-3012 and GS-3012F models may be referred to as the "Switch", the "device", the "system" or the "product" in this User's Guide.

· Product labels, screen names, field labels and field choices are all in bold font. · A key stroke is denoted by square brackets and uppercase text, for example, [ENTER] means the "enter" or "return" key on your keyboard. · "Enter" means for you to type one or more characters and then press the [ENTER] key.

"Select" or "choose" means for you to use one of the predefined choices.

· A right angle bracket (>) within a screen name denotes a mouse click. For example, Maintenance > Log > Log Setting means you first click Maintenance in the navigation panel, then the Log sub menu and finally the Log Setting tab to get to that screen. · Units of measurement may denote the "metric" value or the "scientific" value. For example, "k" for kilo may denote "1000" or "1024", "M" for mega may denote "1000000" or "1048576" and so on. · "e.g.," is a shorthand for "for instance", and "i.e.," means "that is" or "in other words". 4 GS-3012/GS-3012F User's Guide Document Conventions Icons Used in Figures Figures in this User's Guide may use the following generic icons.

The Switch icon is not an exact representation of your device. The Switch Computer Notebook computer Server DSLAM Firewall Telephone Router GS-3012/GS-3012F User's Guide 5 Safety Warnings Safety Warnings For your safety, be sure to read and follow all warning notices and instructions. · Do NOT use this product near water, for example, in a wet basement or near a swimming pool. · Do NOT expose your device to dampness, dust or corrosive liquids. · Do NOT store things on the device. · Do NOT install, use, or service this device during a thunderstorm. There is a remote risk of electric shock from lightning. · Connect ONLY suitable accessories to the device. · Do NOT open the device or unit. Opening or removing covers can expose you to dangerous high voltage points or other risks.

ONLY qualified service personnel should service or disassemble this device. Please contact your vendor for further information. · For continued protection against risk of fire replace only with same type and rating of fuse. · Make sure to connect the cables to the correct ports. · Place connecting cables carefully so that no one will step on them or stumble over them.

· Always disconnect all cables from this device before servicing or disassembling. · Use ONLY an appropriate power adaptor or cord for your device. Connect it to the right supply voltage (for example, 110V AC in North America or 230V AC in Europe). · Do NOT allow anything to rest on the power adaptor or cord and do NOT place the product where anyone can walk on the power adaptor or cord. · Do NOT use the device if the power adaptor or cord is damaged as it might cause electrocution.

· If the power adaptor or cord is damaged, remove it from the device and the power source. · Do NOT attempt to repair the power adaptor or cord. Contact your local vendor to order a new one. · Do not use the device outside, and make sure all the connections are indoors. There is a remote risk of electric shock from lightning. · Do NOT obstruct the device ventilation slots, as insufficient airflow may harm your device. · The length of exposed (bare) power wire should not exceed 7mm. This product is recyclable. Dispose of it properly. 6 GS-3012/GS-3012F User's Guide Safety Warnings GS-3012/GS-3012F User's Guide 7 Safety Warnings 8 GS-3012/GS-3012F User's Guide Contents Overview Contents Overview Introduction and Hardware .

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See Chapter 4 on page 49. · Command Line Interface. Line commands offer an alternative to the web configurator and in some cases are necessary to configure advanced features. See the CLI Reference Guide.

· FTP. Use FTP for firmware upgrades and configuration backup/restore. See Section 28.8 on page 231. · SNMP. The Switch can be monitored by an SNMP manager. See Section 29.3 on page 234. · Cluster Management. Cluster Management allows you to manage multiple switches through one switch, called the cluster manager.

See Chapter 32 on page 257. 1.3 Good Habits for Managing the Switch Do the following things regularly to make the Switch more secure and to manage the Switch more effectively. · Change the password. Use a password that's not easy to guess and that consists of different types of characters, such as numbers and letters. · Write down the password and put it in a safe place. · Back up the configuration (and make sure you know how to restore it). Restoring an earlier working configuration may be useful if the device becomes unstable or even crashes. If you forget your password, you will have to reset the Switch to its factory default settings. If you backed up an earlier configuration file, you would not have to totally re-configure the Switch.

You could simply restore your last configuration. 34 GS-3012/GS-3012F User's Guide PART II Basic Configuration The Web Configurator (49) Initial Setup Example (59) System Status and Port Statistics (63) Basic Setting (69) 35 36 CHAPTER This chapter shows you how to install and connect the Switch. 2 Hardware Installation and Connection 2.1 Installation Scenarios The Switch can be placed on a desktop or rack-mounted on a standard EIA rack. Use the rubber feet in a desktop installation and the brackets in a rack-mounted installation.

For proper ventilation, allow at least 4 inches (10 cm) of clearance at the front and 3.4 inches (8 cm) at the back of the Switch. This is especially important for enclosed rack installations. 2.2 Desktop Installation Procedure 1 Make sure the Switch is clean and dry.

2 Set the Switch on a smooth, level surface strong enough to support the weight of the Switch and the connected cables. Make sure there is a power outlet nearby. 3 Make sure there is enough clearance around the Switch to allow air circulation and the attachment of cables and the power cord. 4 Remove the adhesive backing from the rubber feet. 5 Attach the rubber feet to each corner on the bottom of the Switch. These rubber feet help protect the Switch from shock or vibration and ensure space between devices when stacking. GS-3012/GS-3012F User's Guide 37 Chapter 2 Hardware Installation and Connection Figure 5 Attaching Rubber Feet Do NOT block the ventilation holes. Leave space between devices when stacking. 2.3 Mounting the Switch on a Rack The Switch can be mounted on an EIA standard size, 19-inch rack or in a wiring closet with other equipment.

Follow the steps below to mount your Switch on a standard EIA rack using a rack-mounting kit. 2.3.1 Rack-mounted Installation Requirements · Two mounting brackets. · Eight M3 flat head screws and a #2 Philips screwdriver. · Four M5 flat head screws and a #2 Philips screwdriver. Failure to use the proper screws may damage the unit. 2.3.1.

1 Precautions · Make sure the rack will safely support the combined weight of all the equipment it contains. · Make sure the position of the Switch does not make the rack unstable or top-heavy. Take all necessary precautions to anchor the rack securely before installing the unit. 2.3.

2 Attaching the Mounting Brackets to the Switch 1 Position a mounting bracket on one side of the Switch, lining up the four screw holes on the bracket with the screw holes on the side of the Switch. 38 GS-3012/GS-3012F User's Guide Chapter 2 Hardware Installation and Connection Figure 6 Attaching the Mounting Brackets 2 Using a #2 Philips screwdriver, install the M3 flat head screws through the mounting bracket holes into the Switch. 3 Repeat steps 1 and 2 to install the second mounting bracket on the other side of the Switch. 4 You may now mount the Switch on a rack. Proceed to the next section.

2.3.3 Mounting the Switch on a Rack 1 Position a mounting bracket (that is already attached to the Switch) on one side of the rack, lining up the two screw holes on the bracket with the screw holes on the side of the rack. Figure 7 Mounting the Switch on a Rack 2 Using a #2 Philips screwdriver, install the M5 flat head screws through the mounting bracket holes into the rack. 3 Repeat steps 1 and 2 to attach the second mounting bracket on the other side of the rack.

GS-3012/GS-3012F User's Guide 39 Chapter 2 Hardware Installation and Connection 40 GS-3012/GS-3012F User's Guide CHAPTER 3 Hardware Overview This chapter describes the front panel and rear panel of the Switch and shows you how to make the hardware connections. 3.1 Front Panel The following figure shows the front panel of the GS-3012. The front panel contains the Switch LEDs, 8 RJ-45 gigabit ports, four dual personality interfaces each consisting of a miniGBIC slot and an RJ-45 gigabit port as well as a console and management port for local management. Figure 8 Front Panel: GS-3012 LED Console Port Ethernet Ports Dual Personality Interfaces Management Port The following figure shows the front panel of the GS-3012F.

The front panel contains the Switch LEDs, 8 mini-GBIC slots, four dual personality interfaces each consisting of a miniGBIC slot and an RJ-45 gigabit port as well as a console and management port for local management. Figure 9 Front Panel: GS-3012F Mini-GBIC slots Console Port Dual Personality Interfaces Management Port GS-3012/GS-3012F User's Guide 41 Chapter 3 Hardware Overview The following table describes the port labels on the front panel. Table 1 Front Panel Connections LABEL 8 100/1000 Mbps RJ-45 Ethernet Ports (GS-3012) 8 Mini-GBIC Slots (GS3012F) Four Dual Personality Interfaces DESCRIPTION Connect these 1Gbps Electrical Ethernet ports to high-bandwidth backbone network Ethernet switches or use them to daisy-chain other switches. Use mini-GBIC transceivers in these slots for fiber-optic connections to backbone Ethernet switches. Each interface has one 1000 Base-T copper RJ-45 port and one Small Form-Factor Pluggable (SFP) fiber port, with one port active at a time. · 4 100/1000 Mbps RJ-45 Gigabit Ports: Connect these Gigabit Ethernet ports to high-bandwidth backbone network Ethernet switches. 4 Mini-GBIC Slots: Use mini-GBIC transceivers in these slots for fiber-optic connections to backbone Ethernet switches. · Console Port Management Port The console port is for local configuration of the Switch. Connect to a computer using an RJ-45 Ethernet cable for local configuration of the Switch. 3.



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1.1 Console Port For local management, you can use a computer with terminal emulation software configured to the following parameters: VT100 Terminal emulation 9600 bps No parity, 8 data bits, 1 stop bit No flow control Connect the male 9-pin end of the console cable to the console port of the Switch. Connect the female end to a serial port (COM1, COM2 or other COM port) of your computer. 3.1.

2 Gigabit Ports The Switch has 1000Base-T auto-negotiating, auto-crossover Ethernet ports. In 10/100/1000 Mbps Fast Ethernet, the speed can be 10 Mbps, 100 Mbps or 1000 Mbps and the duplex mode can be half duplex or full duplex. An auto-negotiating port can detect and adjust to the optimum Ethernet speed (10/100/1000 Mbps) and duplex mode (full duplex or half duplex) of the connected device. An auto-crossover (auto-MDI/MDI-X) port automatically works with a straight-through or crossover Ethernet cable. 42 GS-3012/GS-3012F User's Guide Chapter 3 Hardware Overview Four of the 1000Base-T Ethernet ports are paired with a mini-GBIC slot to create a dual personality interface.

The Switch uses up to one connection for each mini-GBIC and 1000Base-T Ethernet pair. The mini-GBIC slots have priority over the Gigabit ports. This means that if a mini-GBIC slot and the corresponding Gigabit port are connected at the same time, the Gigabit port will be disabled. When auto-negotiation is turned on, a Gigabit port negotiates with the peer automatically to determine the connection speed and duplex mode. If the peer Ethernet port does not support auto-negotiation or turns off this feature, the Switch determines the connection speed by detecting the signal on the cable and using half duplex mode. When the Switch's autonegotiation is turned off, a Gigabit port uses the pre-configured speed and duplex mode when making a connection, thus requiring you to make sure that the settings of the peer Ethernet port are the same in order to connect. 3.1.2.1 Default Ethernet Negotiation Settings The factory default negotiation settings for the Gigabit ports on the Switch are: Speed: Auto Duplex: Auto Flow control: Off Link Aggregation: Disabled 3.

1.2.2 Auto-crossover All ports are auto-crossover, that is auto-MDIX ports (Media Dependent Interface Crossover), so you may use either a straight-through Ethernet cable or crossover Ethernet cable for all Gigabit port connections. Auto-crossover ports automatically sense whether they need to function as crossover or straight ports, so crossover cables can connect both computers and switches/hubs. 3.1.3 Mini-GBIC Slots These are slots for mini-GBIC (Gigabit Interface Converter) transceivers. A transceiver is a single unit that houses a transmitter and a receiver. The Switch does not come with transceivers. You must use transceivers that comply with the Small Form-factor Pluggable (SFP) Transceiver MultiSource Agreement (MSA).

See the SFF committee's INF-8074i specification Rev 1.0 for details. You can change transceivers while the Switch is operating. You can use different transceivers to connect to Ethernet switches with different types of fiber-optic connectors. To avoid possible eye injury, do not look into an operating fiber-optic module's connectors.

Type: SFP connection interface Connection speed: 1 Gigabit per second (Gbps) GS-3012/GS-3012F User's Guide 43 Chapter 3 Hardware Overview

3.1.3.1 Transceiver Installation Use the following steps to install a mini-GBIC transceiver (SFP module). 1 Insert the transceiver into the slot with the exposed section of PCB board facing down.

2 Press the transceiver firmly until it clicks into place. 3 The Switch automatically detects the installed transceiver. Check the LEDs to verify that it is functioning properly. 4 Close the transceiver's latch (latch styles vary). 5 Connect the fiber optic cables to the transceiver. Figure 10 Transceiver Installation Example Figure 11 Connecting the Fiber Optic Cables 3.1.3.2 Transceiver Removal Use the following steps to remove a mini-GBIC transceiver (SFP module). 1 Remove the fiber optic cables from the transceiver.

2 Open the transceiver's latch (latch styles vary). 3 Pull the transceiver out of the slot. Figure 12 Removing the Fiber Optic Cables Figure 13 Opening the Transceiver's Latch Example 44 GS-3012/GS-3012F User's Guide Chapter 3 Hardware Overview Figure 14 Transceiver Removal Example 3.1.4

Management Port The MGMT (management) port is used for local management. Connect directly to this port using an Ethernet cable. You can configure the Switch via Telnet or the web configurator. The default IP address of the management port is 192.168.0.1 with a subnet mask of 255.255.255.0. 3.

2 Rear Panel The following figures show the rear panels of the GS-3012 AC and DC power models followed by the GS-3012F AC and DC power models. The rear panel contains the power receptacle and a connector for external backup power supply. Figure 15 Rear Panel: GS-3012 AC Power Model Figure 16 Rear Panel: GS-3012 DC Power Model Figure 17 Rear Panel: GS-3012F AC Power Model Figure 18 Rear Panel: GS-3012F DC Power Model 3.2.1 Power Connector Make sure you are using the correct power source as shown on the panel.

GS-3012/GS-3012F User's Guide 45 Chapter 3 Hardware Overview To connect the power to the AC power model, insert the female end of power cord to the power receptacle on the rear panel. Connect the other end of the supplied power cord to a 100~240VAC/1.5A power outlet. Make sure that no objects obstruct the airflow of the fans (located on the side of the unit). The DC power models require DC power supply input of 48 VDC to -60 VDC. The GS-3012 DC power model requires 1.5A Max. The GS-3012F DC power model requires 1.25A Max. To connect the power to the unit, insert the one end of the supplied power cord to the power receptacle on the rear panel and the other end to a power outlet.

3.3 LEDs After you connect the power to the Switch, view the LEDs to ensure proper functioning of the Switch and as an aid in troubleshooting. Table 2 LED Descriptions LED BPS COLOR Green STATUS Blinking On Off Amber PWR SYS Green Green Blinking On Off Blinking On Off ALM Red On Off Mini-GBIC Slots LNK ACT LNK/ACT (GS3012) Green Green Green Amber On Off Blinking Blinking On Blinking On Off FDX (GS- Amber 3012) On Off Gigabit Ports The system is transmitting/receiving to/from an Ethernet network. The link to a 1000 Mbps Ethernet network is up. The system is transmitting/receiving to/from an Ethernet network. The link to a 100 Mbps Ethernet network is up. The link to an Ethernet network is down. The Gigabit port is negotiating in full-duplex mode. The Gigabit port is negotiating in half-duplex mode. The link to this port is up.

The link to this port is not connected. This port is receiving or transmitting data. DESCRIPTION The system is receiving power from the backup power supply.



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The backup power supply is connected and active. The backup power supply is not ready or not active.

The system cannot get power from the backup power supply. The system is turned on. The system is off. The system is rebooting and performing self-diagnostic tests. The system is on and functioning properly.

The power is off or the system is not ready/malfunctioning. There is a hardware failure. The system is functioning normally. 46 GS-3012/GS-3012F User's Guide Chapter 3 Hardware Overview Table 2 LED Descriptions (continued) LED 1000 (GS3012F) 100 (GS3012F) COLOR Green STATUS Blinking On Off Amber Blinking On Off MGMT 10 Green Blinking On Off 100 Amber Blinking On Off The system is transmitting/receiving to/from an Ethernet device. The port is connected at 10Mbps. The port is not connected at 10Mbps or to an Ethernet device. The system is transmitting/receiving to/from an Ethernet device. The port is connected at 100Mbps. The port is not connected at 100Mbps or to an Ethernet device. DESCRIPTION The system is transmitting/receiving to/from an Ethernet network.

The link to a 1000 Mbps Ethernet network is up. The link to a 1000 Mbps Ethernet network is down. The system is transmitting/receiving to/from an Ethernet network. The link to a 100 Mbps Ethernet network is up. The link to a 100 Mbps Ethernet network is down. 3.4 Configuring the Switch You may use the embedded web configurator or command line interface to configure the Switch. If you're using the web configurator, you need Internet Explorer 5.5 and later or Netscape Navigator 6 and later. You can access the command line interface using a terminal emulation program on a computer connected to the Switch console port (see Section 3.

1.1 on page 42) or access the Switch using Telnet. The next part of this guide discusses configuring the Switch using the web configurator.

GS-3012/GS-3012F User's Guide 47 Chapter 3 Hardware Overview 48 GS-3012/GS-3012F User's Guide CHAPTER This section introduces the configuration and functions of the web configurator. 4 The Web Configurator 4.

1 Introduction The web configurator is an HTML-based management interface that allows easy Switch setup and management via Internet browser. Use Internet Explorer 6.0 and later or Netscape Navigator 7.0 and later versions. The recommended screen resolution is 1024 by 768 pixels.

In order to use the web configurator you need to allow: · Web browser pop-up windows from your device. Web pop-up blocking is enabled by default in Windows XP SP (Service Pack) 2. · JavaScript (enabled by default). · Java permissions (enabled by default). 4.2 System Login 1 Start your web browser. 2 Type "http://" and the IP address of the Switch (for example, the default is 192.168.1.1) in the Location or Address field.

Press [ENTER]. 3 The login screen appears. The default username is admin and associated default password is 1234. The date and time display as shown if you have not configured a time server nor manually entered a time and date in the General Setup screen. GS-3012/GS-3012F User's Guide 49 Chapter 4 The Web Configurator Figure 19 Web Configurator: Login 4 Click OK to view the first web configurator screen. 4.3 The Status Screen The Status screen is the first screen that displays when you access the web configurator. The following figure shows the navigating components of a web configurator screen. Figure 20 Web Configurator Home Screen (Status) B C DE A A - Click the menu items to open submenu links, and then click on a submenu link to open the screen in the main window. B, C, D, E - These are quick links which allow you to perform certain tasks no matter which screen you are currently working in. B - Click this link to save your configuration into the Switch's nonvolatile memory. Nonvolatile memory is the configuration of your Switch that stays the same even if the Switch's power is turned off. C - Click this link to go to the status page of the Switch. D - Click this link to logout of the web configurator. 50 GS-3012/GS-3012F User's Guide Chapter 4 The Web Configurator E - Click this link to display web help pages.

The help pages provide descriptions for all of the configuration screens. In the navigation panel, click a main link to reveal a list of submenu links. Table 3 Navigation Panel Sub-links Overview BASIC SETTING ADVANCED APPLICATION IP APPLICATION MANAGEMENT GS-3012/GS-3012F User's Guide 51 Chapter 4 The Web Configurator The following table lists the various web configurator screens within the sub-links. Table 4 Web Configurator Screen Sub-links Details BASIC SETTING ADVANCED APPLICATION System Info General Setup Switch Setup IP Setup Port Setup IP APPLICATION MANAGEMENT Maintenance Firmware Upgrade Restore Configuration Backup Configuration Load Factory Default Save Configuration Reboot System Access Control SNMP Trap Group Logins Service Access Control Remote Management Diagnostic Syslog Syslog Server Setup Cluster Management Clustering Management Configuration MAC Table ARP Table Configure Clone Static Routing VLAN DHCP Status VLAN Port Setting Subnet Based VLAN DHCP Relay Static VLAN VLAN Setting Static MAC Forwarding Filtering Spanning Tree Protocol Configuration RSTP MRSTP MSTP Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation Link Aggregation Setting Ling Aggregation Control Protocol Port Authentication 802.1x MAC Authentication Port Security Classifier Policy Rule Queuing Method Multicast Multicast Setting IGMP Snooping VLAN IGMP Filtering Profile MVR Group Configuration Authentication and Accounting RADIUS Server Setup TACACS+ Server Setup Auth and Acct Setup IP Source Guard IP Source Guard Static Binding DHCP Snooping ARP Inspection Status Loop Guard trTCM 52 GS-3012/GS-3012F User's Guide Chapter 4 The Web Configurator The following table describes the links in the navigation panel.

Table 5 Navigation Panel Links LINK Basic Settings System Info General Setup Switch Setup IP Setup This link takes you to a screen that displays general system and hardware monitoring information. This link takes you to a screen where you can configure general identification information about the Switch. This link takes you to a screen where you can set up global Switch parameters such as VLAN type, MAC address learning, GARP and priority queues. This link takes you to a screen where you can configure the IP address, subnet mask (necessary for Switch management) and DNS (domain name server) and set up to 64 IP routing domains. This link takes you to a screen where you can configure settings for individual Switch ports. This link takes you to screens where you can configure port-based or 802.1Q VLAN (depending on what you configured in the Switch Setup menu). You can also configure a subnet based VLAN in these screens. This link takes you to a screen where you can configure static MAC addresses for a port. These static MAC addresses do not age out.



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This link takes you to a screen to set up filtering rules. This link takes you to screens where you can configure the RSTP/MRSTP/MSTP to prevent network loops. This link takes you to a screen where you can configure bandwidth limits on the Switch. This link takes you to a screen to set up broadcast filters. This link takes you to screens where you can copy traffic from one port or ports to another port in order that you can examine the traffic from the first port without interference. DESCRIPTION Port Setup Advanced Application VLAN Static MAC Forwarding Filtering Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation This link takes you to a screen where you can logically aggregate physical links to form one logical, higher-bandwidth link. Port Authentication Port Security Classifier Policy Rule Queuing Method Multicast Auth and Acct This link takes you to a screen where you can configure IEEE 802.1x port authentication as well as MAC authentication for clients communicating via the Switch. This link takes you to a screen where you can activate MAC address learning and set the maximum number of MAC addresses to learn on a port. This link takes you to a screen where you can configure the Switch to group packets based on the specified criteria.

This link takes you to a screen where you can configure the Switch to perform special treatment on the grouped packets. This link takes you to a screen where you can configure queuing with associated queue weights for each port. This link takes you to screens where you can configure various multicast features, IGMP snooping and create multicast VLANs. This link takes you to a screen where you can configure authentication and accounting services via external servers. The external servers can be either RADIUS (Remote Authentication Dial-In User Service) or TACACS+ (Terminal Access Controller Access-Control System Plus).

GS-3012/GS-3012F User's Guide 53 Chapter 4 The Web Configurator Table 5 Navigation Panel Links (continued) LINK IP Source Guard Loop Guard trTCM IP Application Static Routing This link takes you to a screen where you can configure static routes. A static route defines how the Switch should forward traffic by configuring the TCP/IP parameters manually. This link takes you to screens where you can configure the DHCP settings. This link takes you to screens where you can perform firmware and configuration file maintenance as well as reboot the system. This link takes you to screens where you can change the system login password and configure SNMP and remote management.

This link takes you to a screen where you can view system logs and test port(s). This link takes you to screens where you can setup system logs and a system log server. This link takes you to screens where you can configure clustering management and view its status. This link takes you to a screen where you can view the MAC addresses (and types) of devices attached to what ports and VLAN IDs. This link takes you to a screen where you can view the MAC addresses IP address resolution table. This link takes you to a screen where you can copy attributes of one port to other ports. DESCRIPTION This link takes you to screens where you can configure filtering of unauthorized DHCP and ARP packets in your network. This link takes you to a screen where you can configure protection against network loops that occur on the edge of your network. This link takes you to a screen where you can configure Two Rate Three Color Marker settings. DHCP Management Maintenance Access Control Diagnostic Syslog Cluster Management MAC Table ARP Table Configure Clone 4.

3.1 Change Your Password After you log in for the first time, it is recommended you change the default administrator password. Click Management > Access Control > Logins to display the next screen. 54 GS-3012/GS-3012F User's Guide Chapter 4 The Web Configurator Figure 21 Change Administrator Login Password 4.4 Saving Your Configuration When you are done modifying the settings in a screen, click Apply to save your changes back to the run-time memory. Settings in the run-time memory are lost when the Switch's power is turned off. Click the Save link in the upper right hand corner of the web configurator to save your configuration to nonvolatile memory. Nonvolatile memory refers to the Switch's storage that remains even if the Switch's power is turned off. Use the Save link when you are done with a configuration session. 4.

5 Switch Lockout You could block yourself (and all others) from using in-band-management (managing through the data ports) if you do one of the following: 1 Delete the management VLAN (default is VLAN 1). 2 Delete all port-based VLANs with the CPU port as a member. The "CPU port" is the management port of the Switch. 3 Filter all traffic to the CPU port. 4 Disable all ports.

5 Misconfigure the text configuration file. 6 Forget the password and/or IP address. 7 Prevent all services from accessing the Switch. 8 Change a service port number but forget it. GS-3012/GS-3012F User's Guide 55 Chapter 4 The Web Configurator Be careful not to lock yourself and others out of the Switch.

If you do lock yourself out, try using out-of-band management (via the management port) to configure the Switch. 4.6 Resetting the Switch If you lock yourself (and others) from the Switch or forget the administrator password, you will need to reload the factory-default configuration file or reset the Switch back to the factory defaults. 4.6.1 Reload the Configuration File Uploading the factory-default configuration file replaces the current configuration file with the factory-default configuration file. This means that you will lose all previous configurations and the speed of the console port will be reset to the default of 9600bps with 8 data bit, no parity, one stop bit and flow control set to none. The password will also be reset to "1234" and the IP address to 192.168.1.

1. To upload the configuration file, do the following: 1 Connect to the console port using a computer with terminal emulation software. See Section 3.1 on page 45 for details. 2 Disconnect and reconnect the Switch's power to begin a session. When you reconnect the Switch's power, you will see the initial screen.

3 When you see the message "Press any key to enter Debug Mode within 3 seconds ..." press any key to enter debug mode.

4 Type atlc after the "Enter Debug Mode" message. 5 Wait for the "Starting XMODEM upload" message before activating XMODEM upload on your terminal. 6 After a configuration file upload, type atgo to restart the Switch. 56 GS-3012/GS-3012F User's Guide Chapter 4 The Web Configurator Figure 22 Resetting the Switch: Via the Console Port Bootbase Version: V3.1 | 03/08/2007 18:36:17 RAM:Size = 64 Mbytes DRAM POST: Testing: 65536K OK DRAM

Test SUCCESS ! FLASH: Intel 64M ZyNOS Version: V3.

80(LH.0)b4 | 05/31/2007 20:43:39 Press any key to enter debug mode within 3 seconds.



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