Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for ZYXEL GS1510-24. You'll find the answers to all your questions on the ZYXEL GS1510-24 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual ZYXEL GS1510-24
User guide ZYXEL GS1510-24
Operating instructions ZYXEL GS1510-24
Instructions for use ZYXEL GS1510-24
Instruction manual ZYXEL GS1510-24

GS1510-16/GS1510-24

16-port / 24-port Managed Gigabit Ethernet Switch

User's Guide

Default Login Details

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

Firmware Version 1.00
Edition 1, 9/2010

www.zyxel.com

ZyXEL

Copyright © 2010
ZyXEL Communications Corporation

You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide
http://yourpdfguides.com/dref/3651547

Manual abstract:

· Knowledge Base If you have a specific question about your product, the answer may be here. This is a collection of answers to previously asked questions about ZyXEL products. · Forum This contains discussions on ZyXEL products. Learn from others who use ZyXEL products and share your experiences as well. Customer Support In the event of problems that cannot be solved by using this manual, you should contact your vendor. If you cannot contact your vendor, then contact a ZyXEL office for the region in which you bought the device. See http://www.zyxel.com/ web/contact_us.php for contact information. Please have the following information ready when you contact an office. · Product model and serial number. · Warranty Information. · Date that you received your device. · Brief description of the problem and the steps you took to solve it.

4 GS1510 Series User's Guide 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. Note: Notes tell you other important information (for example, other things you may need to configure or helpful tips) or recommendations. Syntax Conventions · The GS1510-16/GS1510-24 may be referred to as the "Switch", the "device", or the "system" 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". GS1510 Series User's Guide 5 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. Switch Computer Notebook computer Server DSLAM Firewall Telephone Switch Router Switch 6 GS1510 Series User's Guide Safety Warnings Safety Warnings · 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. · 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 the power adaptor or cord 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 power outlet. · 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. This product is recyclable. Dispose of it properly. GS1510 Series User's Guide 7 Safety Warnings 8 GS1510 Series User's Guide Contents Overview Contents Overview Introduction and Hardware Overview .

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
. 17 Getting to Know Your Switch .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.. 19 Hardware Installation and Connection .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 23 Hardware Overview .

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.... 27 Basic Settings .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.... 33 The Web Configurator .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....

.....
.....

.....
.....
35 System .....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

45 General Settings .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

47 MAC Management .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 51 Port Mirroring ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.. 55 Port Settings .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 57 Advanced Settings ..
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 61 VLAN .

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
. 63 EEE ....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 71 IGMP Snooping .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 73 Link Aggregation ....
.....
.....
.....

.....
.....
.....

.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 77 Loop Guard ....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.... 81 QoS .
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 85 Storm Control .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 93 Spanning Tree Protocol ..
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 95 Security and Management ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 101 IP Source Guard .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 103 802.1x .....
.....

.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
....117 Web Authentication .
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
... 123 Maintenance ..
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.. 129 SNMP ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

. 135 User Account .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.... 143 Troubleshooting & Product Specifications .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
145 Troubleshooting .....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....

.... 147 Product Specifications .
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 151 Appendices and Index .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
... 157 GS1510 Series User's Guide 9 Contents Overview 10 GS1510 Series User's Guide Table of Contents Table of Contents About This User's Guide ..
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.... 3 Document Conventions.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

.....

.....
.....
.....
.. 5 Safety Warnings.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.. 7 Contents Overview .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.. 9 Table of Contents...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
... 11 Part I: Introduction and Hardware Overview ..
.....
.....

.....
.....
.....
.. 17 Chapter 1 Getting to Know Your Switch.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 19 1.

1 Introduction .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.. 19 1.1.1 Backbone Application .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
. 19 1.1.2 Bridging Example ..
.....
.....

.....
.....
.....
.....

.....
.....

.....
.....

.....
.....
.....
..... 20 1.1.3 High Performance Switching Example ..

.....
.....
.....
.....

.....
.....
.....
.....

..... 21 1.
1.4 IEEE 802.1Q VLAN Application Examples ...
.....
.....

.....
.....
.....
.....

.....
.....
. 21 1.2 Good Habits for Managing the Switch ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 22 Chapter 2 Hardware Installation and Connection ..
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 23 2.

1 Freestanding Installation .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
. 23 2.2 Mounting the Switch on a Rack ...
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.. 24 2.2.1 Ra.
.....
.....

.....
.....
.....
.....

.....
... 48 6.4 SNTP .
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.... 49 Chapter 7 MAC Management.....

.....
.....
.....
.....

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
.... 51 7.
1 Overview .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 51 7.2 What You Can Do ....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
... 51 7.3 What You Need to Know .
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

. 51 7.4 Static MAC Settings .....
.....
.....

.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.... 52 7.
5 MAC Table .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.. 53 Chapter 8 Port Mirroring .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.... 55 8.1 Port Mirroring Settings .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
55 Chapter 9 Port Settings.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.... 57 9.
1 Port Settings .....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
57 9.1.1 Auto Negotiation ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.. 57 12 GS1510 Series User's Guide Table of Contents 9.1.2 Flow Control .....
.....

.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 57 Part III: Advanced Settings .....

.....
.....
.....
.....

.....
.....
.....
.....

61 Chapter 10 VLAN .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
. 63 10.1 Overview ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
. 63 10.2 What You Can Do .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.. 63 10.3 What You Need to Know ..
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
... 63 10.3.1 Introduction to IEEE 802.1Q Tagged VLANs ....

.....
.....
.....
.....

.....
.....
.....
63 10.3.2 Forwarding Tagged and Untagged Frames .....

.....
.....
.....
.....

.....
.....
.....
.... 64 10.4 Port Isolation .....

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
... 64 10.5 VLAN Settings .

You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide
http://yourpdfguides.com/dref/3651547

.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.... 67 10.
6 Tag Settings .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.... 68 10.
7 Port Settings .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
... 69 Chapter 11 EEE..
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 71 11.1 Overview ..
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
. 71 11.1.1 EEE Screen ..
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 71 Chapter 12 IGMP Snooping .....
.....
.....
.....

.....
.....
.....
.....

.....
.....

.....
.....

.....
.....
.....
.....

.. 73 12.1 Overview .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 73 12.2 What You Can Do ..
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 73 12.3 What You Need to Know .

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 73 12.
3.1 IGMP Snooping and VLANs ....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 74 12.4 General Settings ...
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 74 12.5 Port Settings .

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 75 Chapter 13 Link Aggregation ....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....

.....
.....
.. 77 13.1 Overview .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 77 13.2 What You Can Do ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.. 77 13.3 What You Need to Know ..
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 77 13.3.

1 Dynamic Link Aggregation .....
.....
.....
.....

.....
.....
.....

.....

.....
.....
.....
..... 77 13.4 Static Trunk ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 78 13.5 LACP ..

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 79 Chapter 14 Loop Guard...
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
... 81 GS1510 Series User's Guide 13 Table of Contents 14.1 Overview .
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.. 81 14.2 What You Need to Know ..
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 81 14.3 Loop Guard .

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 83 Chapter 15 QoS.

.....
.....
.....
.....

.....
.....

.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
... 85 15.1 Overview .
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.. 85 15.2 What You Can Do .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
... 85 15.3 What You Need to Know .
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.... 85 15.3.1 Queuing algorithms ....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.... 85 15.3.2 QoS Enhancement ....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
86 15.4 Port Priority ....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
. 86 15.5 IP DiffServ (DSCP) ...
.....

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
.....
.....

..... 87 15.5.1 Differentiated Services Code Point (DSCP) ...
.....
.....
.....

.....
.....
.....
.....

..... 88 15.6 Priority/Queue Mapping .
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
89 15.7 Queuing Method .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
... 90 Chapter 16 Storm Control..
.....
.....

.....
.....
.....
.....

.....
.....
.....

.....

.....
.....
.....
.....

.....
.....
93 16.0.1 Broadcast Storm Control Setup ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 93 Chapter 17 Spanning Tree Protocol....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.. 95 17.1 Overview .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 95 17.2 What You Can DO ....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
95 17.3 What You Need to Know ....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 95 17.3.1 STP Terminology ..

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 96 17.
3.2 How STP Works ....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
... 96 17.4 General Settings .....

.....
.....

.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
. 97 17.5 STP Status Screen ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.... 98 Part IV: Security and Management .....
.....
.....
.....

.....
.....
.....
..... 101 Chapter 18 IP Source Guard...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
... 103 18.1 Overview .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 103 18.2 What You Can Do ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
103 18.3 What You Need To Know ....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
... 103 18.3.1 DHCP Snooping Overview .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
104 18.3.2 ARP Inspection Overview .....

.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
... 105 18.4 DHCP Snooping .
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 107 14 GS1510 Series User's Guide Table of Contents 18.
5 Port Settings .....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 108 18.6 ARP Inspection ...
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

.....

110 18.6.1 Filter Table .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
...111 18.7 Binding Table .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
112 18.7.1 Static Entry Settings .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....112 18.7.

2 Binding Table .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
..114 Chapter 19 802.1x ..
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

. 117 19.1 Overview .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

....117 19.2 What You Can Do .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....

.....
....117 19.3 What You Need to Know .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

....118 19.3.1 IEEE 802.1x Authentication ...
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.118 19.3.2 Local User Accounts .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....118 19.4 Global Settings .
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..118 19.5 Port Settings .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 120 Chapter 20 Web Authentication .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
123 20.1 Overview ....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.. 123 20.2 What You Can Do ..
.....

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
.....
.....

..... 123 20.3 What You Need to Know ...
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
123 20.3.1 User Authentication Experience ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.... 124 20.4 Configuration .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

125 20.5 Customization .....
.....
.....
.....

.....
.....
.....

.....

.....
.....
.....
.....

.....
.....
.....
..... 126 Chapter 21 Maintenance .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 129 21.1 Overview ..

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

129 21.2 What You Can Do .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.... 129 21.
3 Configuration .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
130 21.3.1 Backup Settings ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 130 21.3.

2 Upgrade Configuration .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

. 131 21.3.3 Restore Factory Default Settings .....
.....
.....
.....

.....
.....
.....
.....

.....
.....

.. 131 21.4 Firmware ..
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
132 21.5 Reboot .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 132 21.6 System Log ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 133 21.6.1 Syslog ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
... 133 Chapter 22 SNMP.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 135 22.1 Overview ..
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 135 22.2 What You Can Do .
.....
.....
.....

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
.....
..... 135 GS1510 Series User's Guide 15 Table of Contents 22.3 What You Need to Know ..

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 135 22.3.1 About SNMP ..
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.. 135 .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

. 137 22.3.2 Supported MIBs 22.3.3 SNMP Traps .....
.....
.....
.....

.....
.....
.....

.....

.....
.....
.....
.....

.....
.....
.....
137 22.4 SNMP Settings .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
... 137 22.5 Community Name .
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.. 138 22.6 Trap Receiver .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 140 Chapter 23 User Account...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 143 23.1 Overview .

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

. 143 23.2 User Account Screen .....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
143 Part V: Troubleshooting & Product Specifications .....
.....

.....
.. 145 Chapter 24 Troubleshooting...
.....
.....

.....
.....

.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 147 24.1 Power, Hardware Connections, and LEDs .
.....
.....
.....

.....
.....
.....
.....

.....
.....
.... 147 24.
2 Switch Access and Login .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 148 Chapter 25 Product Specifications ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.. 151 25.1 General Switch Specifications ..
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.. 151 Part VI: Appendices and Index ...
.....
.....

.....
.....
.....
.....

.....
. 157 Appendix A Device Auto Discovery....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 159 Appendix B IP Addresses and Subnetting ...
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.. 165 Appendix C Legal Information .....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
..... 175 Index....

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....

. 179 16 GS1510 Series User's Guide PART I Introduction and Hardware Overview Getting to Know Your Switch (19) Hardware Installation and Connection (23) Hardware Overview (27) 17 18 CHAPTER 1 Getting to Know Your Switch This chapter introduces the main features and applications of the Switch. 1.1 Introduction Your Switch is an intelligent layer 2 switch with 1000BASE-T RJ-45 ports and miniGBIC slots (GS1510-24 only) for fiber-optic transceivers. · The GS1510-16 has 16 1000BASE-T RJ-45 ports.

· The GS1510-24 has 24 1000BASE-T RJ-45 ports, and two SFP open slots. With its built-in Web Configurator, managing and configuring the Switch is easy. The Switch can operate in low power idle mode in compliance with IEEE 802.3az Energy Efficient Ethernet (EEE). See Chapter 25 on page 151 for a full list of software features available on the Switch.

1.1.1 Backbone Application The Switch is an ideal solution for small networks where rapid growth can be expected in the near future. The Switch can be used standalone for a group of heavy traffic users. You can connect computers and servers directly to the Switch's port or connect other switches to the Switch. GS1510 Series User's Guide 19 Chapter 1 Getting to Know Your Switch In this example, all computers can share high-speed applications on the server. To expand the network, simply add more networking devices such as switches, routers, computers, print servers etc. Figure 1 Backbone Application 1.1.2 Bridging Example In this example application the Switch connects different company departments (RD and Sales) to the corporate backbone.

It can alleviate bandwidth contention and eliminate server and network bottlenecks. All users that need high bandwidth can connect to high-speed department servers via the Switch. You can provide a super-fast uplink connection by using a Gigabit Ethernet/mini-GBIC port on the Switch. Moreover, the Switch eases supervision and maintenance by allowing network managers to centralize multiple servers at a single location. Figure 2 Bridging Application 20 GS1510 Series User's Guide Chapter 1 Getting to Know Your Switch 1.1.3 High Performance Switching Example The Switch is ideal for connecting two networks that need high bandwidth. In the following example, use trunking to connect these two networks. Switching to higher-speed LANs such as ATM (Asynchronous Transmission Mode) is not feasible for most people due to the expense of replacing all existing Ethernet cables and adapter cards, restructuring your network and complex maintenance. The Switch can provide the same bandwidth as ATM at much lower cost while still being able to use existing adapters and switches.

Moreover, the current LAN structure can be retained as all ports can freely communicate with each other. Figure 3 High Performance Switched Workgroup Application 1.1.4 IEEE 802.1Q VLAN Application Examples A VLAN (Virtual Local Area Network) allows a physical network to be partitioned into multiple logical networks.

Stations on a logical network belong to one group. A station can belong to more than one group. With VLAN, a station cannot directly talk to or hear from stations that are not in the same group(s) unless such traffic first goes through a router. For more information on VLANs, refer to Chapter 10 on page 63. 1. 1.4.1 Tag-based VLAN Example Ports in the same VLAN group share the same frame broadcast domain thus increase network performance through reduced broadcast traffic. VLAN groups can be modified at any time by adding, moving or changing ports without any recabling. GS1510 Series User's Guide 21 Chapter 1 Getting to Know Your Switch Shared resources such as a server can be used by all ports in the same VLAN as the server. In the following figure only ports that need access to the server need to be part of VLAN 1.

You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide
http://yourpdfguides.com/dref/3651547

Ports on the Switch can belong to other VLAN groups too. Figure 4 Shared Server Using VLAN Example 1.2 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. 22 GS1510 Series User's Guide CHAPTER This chapter shows you how to install and connect the Switch. 2 Hardware Installation and Connection 2.1 Freestanding Installation 1 2 Make sure the Switch is clean and dry.

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. Make sure there is enough clearance around the Switch to allow air circulation and the attachment of cables and the power cord. Remove the adhesive backing from the rubber feet. 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. 3 4 5 Figure 5 Attaching Rubber Feet GS1510 Series User's Guide 23 Chapter 2 Hardware Installation and Connection Note: Do NOT block the ventilation holes. Leave space between devices when stacking. 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 Mounting the Switch on a Rack This section lists the rack mounting requirements and precautions and describes the installation steps. 2.2.1 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. Note: Failure to use the proper screws may damage the unit. 2.

2.1.1 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 topheavy. Take all necessary precautions to anchor the rack securely before installing the unit. 2.2.2 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. Figure 6 Attaching the Mounting Brackets 24 GS1510 Series User's Guide Chapter 2 Hardware Installation and Connection Using a #2 Philips screwdriver, install the M3 flat head screws through the mounting bracket holes into the Switch. Repeat steps 1 and 2 to install the second mounting bracket on the other side of the Switch.

You may now mount the Switch on a rack. Proceed to the next section. 2 3 4 2.2.3 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. Repeat steps 1 and 2 to attach the second mounting bracket on the other side of the rack. 3 GS1510 Series User's Guide 25 Chapter 2 Hardware Installation and Connection 26 GS1510 Series 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 figures below show the front panel of the Switch.

Figure 8 GS1510-16 Front Panel LEDs RJ-45 Gigabit Ethernet Figure 9 GS1510-24 Front Panel LEDs RJ-45 Gigabit Ethernet Mini-GBIC GS1510 Series User's Guide 27 Chapter 3 Hardware Overview The following table describes the ports on the panels. Table 1 Panel Connections CONNECTO R RJ-45 Gigabit Ethernet Ports Mini GBIC Slots (GS1510-24 only) DESCRIPTION Connect these Gigabit 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. 3.1.1 Ethernet Ports The GS1510-16 has 16 auto-negotiating, auto-crossover RJ-45 Gigabit Ethernet ports. The GS1510-24 has 24 auto-negotiating, auto-crossover RJ-45 Gigabit Ethernet ports. The speed of the Gigabit Ethernet ports can be 10 Mbps, 100Mbps or 1000Mbps and the duplex mode can be half duplex (at 100 Mbps) or full duplex. An auto-negotiating port can detect and adjust to the optimum Ethernet speed (100/1000Mpbs) and duplex mode (full duplex or half duplex) of the connected device.7 An auto-crossover (auto-MDI/MDI-X) port automatically works with a straightthrough or crossover Ethernet cable.

3.1.1.1 Default Ethernet Settings The factory default negotiation settings for the Ethernet ports on the Switch are: · Speed: Auto · Duplex: Auto · Flow control: Off 3.1.2 Mini-GBIC Slots There are two mini-GBIC (Gigabit Interface Converter) slots for mini-GBIC transceivers on GS1510-24. 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 SFP Transceiver MultiSource Agreement (MSA). See the SFF committee's INF-8074i specification Rev 1.

0 for details. 28 GS1510 Series User's Guide Chapter 3 Hardware Overview 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. · Type: SFP connection interface · Connection speed: 1 Gigabit per second (Gbps) Note: To avoid possible eye injury, do not look into an operating fiber-optic module's connectors. 3.

1.2.1 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. Figure 10 Transceiver Installation Example 2 3 Press the transceiver firmly until it clicks into place.

The Switch automatically detects the installed transceiver. Check the LEDs to verify that it is functioning properly. Figure 11 Installed Transceiver 3.1.2.2 Transceiver Removal Use the following steps to remove a mini GBIC transceiver (SFP module).

You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide
http://yourpdfguides.com/dref/3651547

GS1510 Series User's Guide 29 Chapter 3 Hardware Overview Open the transceiver's latch (latch styles vary). 1 Figure 12 Opening the Transceiver's Latch Example 2 Pull the transceiver out of the slot. Figure 13 Transceiver Removal Example 3.1.

3 The RESET Button Reset the Switch to its factory default configuration via the RESET button. Press the RESET button for at least five seconds and then release. The Switch automatically reboots and reloads its factory default configuration file. The RESET button is on the front panel of the Switch. Note: When you use the RESET button all of your configuration settings will be lost. Use the default IP address (192.168.1.1) and user name (admin) and password (1234) to log back into the Switch. It may take up to 2 minutes for the Switch to restart when you reload the default configuration file.
3.2 LEDs The following table describes the LEDs. Table 2 LEDs LED PWR SYS STATUS Green Off Green Off On On DESCRIPTION The system is turned on. The system is off. The system is on and functioning properly.
The system is off or is malfunctioning. 30 GS1510 Series User's Guide Chapter 3 Hardware Overview Table 2 LEDs (continued) LED LINK/ACT STATUS Green Amber Blinking Off On On DESCRIPTION The link to a 10/1000 Mbps Ethernet network is up. The link to a 100 Mbps Ethernet network is up. The port is transmitting/receiving data. The link to an Ethernet network is down.
On The port is negotiating in full-duplex mode. The port is negotiating in half-duplex mode and no collisions are occurring. On The port has a successful connection. The port is receiving or transmitting data. No Ethernet device is connected to this port or the link to an Ethernet network is down. Gigabit Ethernet Ports FDX Amber Off Mini-GBIC Slots (GS1510-24 ONLY) LNK/ACT Green Blinking Off 3.3 Rear Panel The following figures show the rear panels of the AC power input model Switch. The rear panel contains a receptacle for the power cord. Figure 14 GS1510-16 Rear Panel Figure 15 GS1510-24 Rear Panel 3.3.

1 Power Connector Make sure you are using the correct power source as shown on the panel. GS1510 Series User's Guide 31 Chapter 3 Hardware Overview To connect the power to the Switch, insert the female end of the power cord into the power receptacle on the rear panel. Connect the other end of the supplied power cord to a 100~240V AC, 50/60 Hz power outlet capable of supplying at least 0.3A. 32 GS1510 Series User's Guide PART II Basic Settings The Web Configurator (35) System (45) General Settings (47) MAC Management (51) Port Mirroring (55) Port Settings (57) 33 34 CHAPTER 4 The Web Configurator This section introduces the configuration and functions of the Web Configurator. 4.1 Introduction The Web Configurator is an HTML-based management interface that allows easy setup and management of the Switch via an Internet browser. Use Internet Explorer 6.0 or later to access the web configurator. 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). Note: This User's Guide shows screens from the GS1510 Series, unless otherwise specified.
4.2 Device Auto Discovery Utility To access the web configurator, you will need to know the IP address of the Switch. If the default IP address (192.168.1. 1) has been changed, use the ZyXEL device discovery utility to easily locate the Switch on your network. The utility can be found on the CD that came with the Switch, see Appendix A on page 159 for installation and usage details. 4.3 System Login 1 Start your web browser. GS1510 Series User's Guide 35 Chapter 4 The Web Configurator 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]. The login screen appears.

The default username is admin and the associated default password is 1234. 2 3 Figure 16 Web Configurator: Login 4 Click Login to view the first Web Configurator screen. 4.3.1 Smart Mode The Smart mode screens enable you to quickly set up important options such as basic IP settings, Energy Efficient Ethernet, Web Authentication, DHCP Snooping and Spanning Tree Protocol (STP). To go directly to the Advance mode settings, see Section 4.3.2 on page 40. 36 GS1510 Series User's Guide Chapter 4 The Web Configurator 4.3.
1.1 IP Setting The Smart > IP Setting screen is the first screen that displays when you access the Web Configurator. Use this screen to configure the IP address and subnet mask for the Switch. Click Apply to save the changes. Figure 17 Web Configurator Smart Screen IP Setting 4.
3.1.2 EEE (Energy Efficient Ethernet) Use this screen to reduce energy consumption over RJ-45 Ethernet Ports during idle periods. Click the EEE tab (Energy Efficient Ethernet) to display the screen as shown next. You can enable IEEE 802.
3az Energy Efficient Ethernet on a port by clicking on it in the Switch graphic. Click Apply to save any changes. Figure 18 Web Configurator Smart Screen - EEE GS1510 Series User's Guide 37 Chapter 4 The Web Configurator 4.3.1.3 Web Authentication Click the Web Authentication tab to open the screen as shown next. This feature is used to authenticate users before they access a website on the Internet. Use the ON or OFF button on this screen to globally enable/disable web authentication across all ports. You can enable or disable web authentication on a specific port by clicking on it. When a port is green, it means authentication is enabled on the port.

The default user name and password for web authentication is guest/guest. You can change the password on this screen. The Management > User Account screen (Section 23.2 on page 143) allows you to create more user accounts for web authentication. Click Apply to save any changes. Figure 19 Web Authentication Smart Screen - Web Authentication 4.3.1.4 DHCP Snooping Use this screen to enable or disable the DHCP Snooping feature which filters unauthorized DHCP packets on the network. Click the DHCP Snooping tab to open the screen as shown next.
Use the ON or OFF button on this screen to enable or disable DHCP Snooping. You can set a specific port to act as a server port by clicking on it to make it green. A server port is a port that is connected to a DHCP server. Note: You can only enable one port as a server port on this screen, to enable more than one port, use the advanced DHCP snooping screen (Section 18.4 on page 107).
38 GS1510 Series User's Guide Chapter 4 The Web Configurator Click Apply to save any changes. Figure 20 Web Configuration Smart Screen - DHCP Snooping 4.3.1.5 STP (Spanning Tree Protocol) Use this screen to activate the Spanning Tree Protocol (STP) feature which is used to prevent loops in the core of your network.

[You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide](http://yourpdfguides.com/dref/3651547)
http://yourpdfguides.com/dref/3651547

Click the STP tab to open the screen as shown next. Use the OFF or ON button to globally enable or disable Spanning Tree Protocol for the Switch. Figure 21 Web Configurator Smart Screen - STP GS1510 Series User's Guide 39 Chapter 4 The Web Configurator 4.3.2 The Advanced Main Screen Click Advance to display the following screen that shows the main navigating components of the Web Configurator screen. Figure 22 Web Configurator Advanced Screens (System Information) A B C D A - The device graphic displays the status of the ports. B - Use the About link to view more information about the device's vendor. Use the Logout link to exit the Web Configurator. Use the Smart button to go to the smart screens where you can quickly set up some main functions. Use the Advanced button to go to the advanced configuration screens.

C - The navigation panel has links to screens that let you configure the Switch's features. D - The function frame allows you to view and edit individual feature settings. 4.3.3 The Navigation Panel Navigate to individual feature configuration screens from the navigation panel. 40 GS1510 Series User's Guide Chapter 4 The Web Configurator The following table describes the links in the navigation panel. Table 3 Navigation Panel Links LINK System Status System Information Basic Settings General Settings Use these screens to configure the system name, IP address, maximum frame size, and system time settings. MAC Management Port Mirroring Use these screens to configure static MAC address settings and view the MAC table. Use this screen to copy traffic from one port or ports to another port in order that you can examine the traffic from the first port without interference. Use this screen to enable/disable a port, configure the port speed and duplex and flow control, and view the current connection status.

Use these screens to view general system information such as firmware version, IP address and so on. DESCRIPTION Port Settings Advanced Settings VLAN Port Isolation Use this screen to isolate each port from communicating with each other. Each port can only communicate with the CPU management port. VLAN Use these screens to create new IEEE 802.1Q VLANs as well as configuring Port VLAN ID (PVID), tag/untag, and acceptable frame settings.

Use this screen to enable/disable Energy Efficient Ethernet on each port. Use this screen to configure multicast related settings such as IGMP Snooping, IGMP Snooping VLAN, unknown multicast packet handling, and immediate leave ports. Uses these screens to logically aggregate physical links to form one logical, higher-bandwidth link. Use this screen to configure protection against network loops that occur on the edge of your network. Use these screens to configure 802.

1p priority, IP Diffserv (DSCP), queuing method with associated queue weights and priority/queue mapping for the Switch. Use this screen to cap the rate of broadcast, multicast and destination lookup failure (DLF) packets the Switch will allow on individual ports. Use these screens to configure the STP/RSTP to prevent network loops. EEE IGMP Snooping Link Aggregation Loop Guard QoS Storm Control STP Security IP Source Guard DHCP Snooping ARP Inspection Use these screens to configure filtering of unauthorized DHCP packets in your network. Use these screens to configure filtering of unauthorized ARP packets in your network. Binding Table Use this screen to view the information of any hosts which successfully connected to an IP address through the DHCP server. GS1510 Series User's Guide 41 Chapter 4 The Web Configurator Table 3 Navigation Panel Links (continued) LINK 802.1x DESCRIPTION Use this screen to configure 802.1x authentication method. This method uses an authentication server (RADIUS server) to validate access to a port based on a username and password provided by the user.

Use this screen to configure settings that define when notifications are sent to an external management station. Use this screen to perform firmware upgrades, configuration backup and restore. Use this screen to reboot the Switch or to restore the default configuration of the Switch. Use this screen to define security parameters for SNMP v1 and SNMP v2c. Use this screen to configure settings that define when notifications are sent to an external management station. Web Authentication Management Maintenance SNMP User Account Use this screen to create users and assign them to pre-defined SNMP groups. 4.3.4 Change Your Password After you log in for the first time, it is recommended you change the default administrator password. Click Management > User Account to display the next screen.

Click 1 in the No. field to change the admin password. Figure 23 Change Administrator Login Password 42 GS1510 Series User's Guide Chapter 4 The Web Configurator 4.4 Saving Your Configuration When you are done modifying the settings in a screen, click Apply to save your changes back to the Switch. 4. 5 Switch Lockout You could block yourself (and all others) from using the Web Configurator if you: 1 Remove all the ports from the default VLAN (default is VLAN 1) when no other VLANs exist. Disable all ports. Forget the password and/or IP address. Enable Dynamic ARP without entering the proper MAC to IP address binding. 2 3 4 4.

6 Resetting the Switch If you lock yourself (and others) from the Switch or forget the administrator password, you will need to reset the Switch back to the factory defaults. Use the RESET button to reset the Switch back to factory defaults. Press and hold the RESET button for five seconds. The Switch will reload its factory defaults. The Switch is now reinitialized with a default configuration file including the default administrator username (admin) and password (1234). The IP address of the Switch also reverts to the default 192.168.1.1. GS1510 Series User's Guide 43 Chapter 4 The Web Configurator 4.

7 Logging Out of the Web Configurator Click Logout on the top right corner of the screen to exit the Web Configurator. You have to log in with your password again after you log out. This is recommended after you finish a management session for security reasons. Figure 24 Web Configurator: Logout Link 44 GS1510 Series User's Guide CHAPTER This chapter describes the system screens. 5 System 5.1 System Screen The home screen of the Web Configurator displays general system information. Click System Status > System Information in the navigation panel to view device specific information such as host name, firmware version and so on. Figure 25 System The following table describes the labels in this screen. Table 4 System LABEL Model Name Host Name Boot Code Version DESCRIPTION This field displays the model name of your Switch. This field displays the name of your Switch.

This field displays the boot code version. GS1510 Series User's Guide 45 Chapter 5 System Table 4 System (continued) LABEL Firmware Version Built Date DHCP Client IP Address DESCRIPTION This field displays the version number of the Switch's current firmware.

You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide
http://yourpdfguides.com/dref/3651547

Click Upgrade to go to the firmware upgrade screen. See Section 21.3.
2 on page 131. This field displays the date of the currently installed firmware. This field displays whether the DHCP client feature is enabled or disabled. This field indicates the IP address of the Switch. You can click the existing IP address to change it.
See Section 6.2 on page 47. Subnet Mask Default Gateway MAC Address Management VLAN CPU Loading Memory Information Current Time Refresh This field indicates the subnet mask of the Switch. This field indicates the IP address of the default gateway. This field displays the MAC (Media Access Control) address of the Switch. This field displays the VLAN ID that is used for the Switch management purposes. This field displays the percentage of your Switch's system load. This field displays the total memory the Switch has and the memory which is currently available (Free) and occupied (Usage). This field displays current date (yyyy-mm-dd) and time (hh:mm:ss). Click this to update the information in this screen.

46 GS1510 Series User's Guide CHAPTER 6 General Settings This chapter describes the General Settings screens in the Basic Settings menu. 6.1 What You Can Do · Use the System screen (Section 6.2 on page 47) to configure the basic IP address settings for the Switch. · Use the Jumbo Frame screen (Section 6.3 on page 48) to configure the jumbo frame size the Switch accepts. · Use the SNTP screen (Section 6.4 on page 49) to configure the date and time of the Switch. 6.2 System Use the System Settings screen under Basic Settings > General Settings to set up the IP address for the Switch.
You can enable DHCP or set up a static IP address. The following screen appears when you click Basic Settings > General Settings > System. Figure 26 System Settings GS1510 Series User's Guide 47 Chapter 6 General Settings The following table describes the labels in this screen. Table 5 System Settings LABEL Hostname DESCRIPTION Enter up to 16 alphanumeric characters for the name of your Switch. Hyphens (-) and underscores (_) are also allowed. Select Enable to allow the Switch to automatically get an IP address from a DHCP server. Click Renew to have the Switch reget an IP address from the DHCP server. Select Disable if you want to configure the Switch's IP address manually. Enter the IP address of your Switch in dotted decimal notation. For example, 192.
168.1.1. Enter the IP subnet mask of your Switch in dotted decimal notation for example 255.255.255.0. Enter the IP address of the default outgoing gateway in dotted decimal notation, for example 192.168.1.

5. Enter a VLAN ID used for Switch management purposes. Click Apply to save your changes back to the Switch. Click Refresh to begin configuring this screen afresh. DHCP Client Static IP Address Subnet Mask Default Gateway Management VLAN Apply Refresh 6.3 Jumbo Frame Jumbo frames are Ethernet frames with a payload greater than 1500 bytes. Jumbo frames can enhance data transmission efficiency in a Gigabit network. Use this screen to configure the jumbo frame size the Switch accepts. Click Basic Settings > General Settings > Jumbo Frame to display the screen as shown. Figure 27 Basic Settings > General Settings > Jumbo Frame The following table describes the labels in this screen.
Table 6 Basic Settings > General Settings > Jumbo Frame LABEL Frame Size DESCRIPTION Select the maximum number of bytes (1522, 1536, 1552 or 9216) of a jumbo frame. The bigger the frame size, the better the performance. 48 GS1510 Series User's Guide Chapter 6 General Settings Table 6 Basic Settings > General Settings > Jumbo Frame (continued) LABEL Apply Refresh DESCRIPTION Click Apply to save your changes back to the Switch. Click Refresh to begin configuring this screen afresh. 6.
4 SNTP Use this screen to configure system date and time. Click Basic Settings > General Settings > SNTP to display the screen as shown. Figure 28 Basic Settings > General Settings > SNTP The following table describes the labels in this screen. Table 7 Basic Settings > General Settings > SNTP LABEL Current Time Current Date Manual New Time DESCRIPTION This field displays the time you open this menu (or refresh the menu). This field displays the date you open this menu.
Select this option if you want to enter the system date and time manually. Enter the new date in year, month and day format and time in hour, minute and second format. The new date and time then appear in the Current Date and Current Time fields after you click Apply. Current Time and Date Time and Date Settings GS1510 Series User's Guide 49 Chapter 6 General Settings Table 7 Basic Settings > General Settings > SNTP (continued) LABEL Enable Network Time Protocol NTP Server Time Zone DESCRIPTION Select this option to use Network Time Protocol (NTP) for the time service. Select a pre-designated time server or type the IP address of your time server. The Switch searches for the timeserver for up to 60 seconds. Select the time difference between UTC (Universal Time Coordinated, formerly known as GMT, Greenwich Mean Time) and your time zone from the drop-down list box. Daylight Saving Settings Daylight saving is a period from late spring to early fall when many countries set their clocks ahead of normal local time by one hour to give more daytime light in the evening. State Start Date Select Enable if you want to use Daylight Saving Time. Otherwise, select Disable to turn it off.

Configure the day and time when Daylight Saving Time starts if you enabled Daylight Saving Time. The time is displayed in the 24 hour format. Here are a couple of examples: Daylight Saving Time starts in most parts of the United States on the second Sunday of March. Each time zone in the United States starts using Daylight Saving Time at 2 A.M. local time. So in the United States you would select Second, Sunday, March and 2:00. Daylight Saving Time starts in the European Union on the last Sunday of March. All of the time zones in the European Union start using Daylight Saving Time at the same moment (1 A.M. GMT or UTC). So in the European Union you would select Last, Sunday, March and the last field depends on your time zone. In Germany for instance, you would select 2:00 because Germany's time zone is one hour ahead of GMT or UTC (GMT+1). End Date Configure the day and time when Daylight Saving Time ends if you enabled Daylight Saving Time. The time field uses the 24 hour format.
Here are a couple of examples: Daylight Saving Time ends in the United States on the last Sunday of October. Each time zone in the United States stops using Daylight Saving Time at 2 A.M. local time. So in the United States you would select First, Sunday, November and 2:00.
Daylight Saving Time ends in the European Union on the last Sunday of October. All of the time zones in the European Union stop using Daylight Saving Time at the same moment (1 A.

[You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide](http://yourpdfguides.com/dref/3651547)
http://yourpdfguides.com/dref/3651547

M. GMT or UTC). So in the European Union you would select Last, Sunday, October and the last field depends on your time zone. In Germany for instance, you would select 2:00 because Germany's time zone is one hour ahead of GMT or UTC (GMT+1). Apply Refresh Click Apply to save your changes back to the Switch. Click Refresh to begin configuring this screen afresh. 50 GS1510 Series User's Guide CHAPTER 7.1 Overview 7 MAC Management Use these screens to add, delete and view entries in the MAC address table.

The MAC Table (a MAC table is also known as a filtering database) shows how frames are forwarded or filtered across the Switch's ports. When a device (which may belong to a VLAN group) sends a packet which is forwarded to a port on the Switch, the MAC address of the device is shown on the Switch's MAC Table. It also shows whether the MAC address is dynamic (learned by the Switch) or static (manually entered). 7.2 What You Can Do · Use the Static MAC Settings screen (Section 7.4 on page 52) to manually add a static MAC address to the table. · Use the MAC Table screen (Section 7.5 on page 53) to view the static and dynamic MAC address entries. 7.3 What You Need to Know The Switch uses the MAC Table to determine how to forward frames.
See the following figure. 1 The Switch examines a received frame and learns the port from which this source MAC address came. The Switch checks to see if the frame's destination MAC address matches a source MAC address already learned in the MAC Table. · If the Switch has already learned the port for this MAC address, then it forwards the frame to that port. 2 GS1510 Series User's Guide 51 Chapter 7 MAC Management · If the Switch has not already learned the port for this MAC address, then the frame is flooded to all ports.
Too much port flooding leads to network congestion. · If the Switch has already learned the port for this MAC address, but the destination port is the same as the port it came in on, then it filters the frame. Figure 29 MAC Table Flowchart 7.4 Static MAC Settings A static Media Access Control (MAC) address is an address that has been manually entered in the MAC address table. Static MAC addresses do not age out.
When you set up static MAC address rules, you are setting static MAC addresses for a port. This may reduce the need for broadcasting. Click Basic Settings > MAC Management > Static MAC Settings in the navigation panel to display the configuration screen as shown. Figure 30 Static MAC Settings 52 GS1510 Series User's Guide Chapter 7 MAC Management The following table describes the labels in this screen. Table 8 Static MAC Settings LABEL DESCRIPTION Static MAC Settings MAC Address Enter the MAC address of a computer or device that you want to add to the MAC address table. VLAN ID Port Apply Refresh Enter the VLAN ID to apply to the computer or device. Enter the port number to which the computer or device is connected. Click Apply to add the MAC address entry to the MAC address table. Click Refresh to begin configuring this screen afresh. Static MAC Table MAC Address This field displays the MAC address of a manually entered MAC address entry.

VLAN ID Port This field displays the VID of a manually entered MAC address entry. This field displays the port number of a manually entered MAC address entry. The MAC address with the port listed as CPU is the Switch's MAC address. Click Delete to remove this manually entered MAC address entry from the MAC address table. You cannot delete the Switch's MAC address from the static MAC address table. Action 7.5 MAC Table Use the MAC Table screen to view entries in the MAC address table. Click Basic Settings > MAC Management > MAC Table in the navigation panel to display the screen as shown. Figure 31 MAC Table GS1510 Series User's Guide 53 Chapter 7 MAC Management The following table describes the labels in this screen. Table 9 MAC Table LABEL Show Type Apply Refresh Type VLAN ID Port DESCRIPTION Select Static, Dynamic, or All and then click Apply to display the corresponding MAC address entries on this screen.
Click this to update the information in the MAC table. This field displays whether this entry was entered manually (Static) or whether it was learned by the Switch (Dynamic). This field displays the VLAN ID of the MAC address entry. This field displays the port number the MAC address entry is associated. It displays CPU if it is the entry for the Switch itself.
MAC Address This field displays a MAC address. 54 GS1510 Series User's Guide CHAPTER This chapter discusses port mirroring. 8 Port Mirroring 8.1 Port Mirroring Settings Port mirroring allows you to copy traffic flow to a monitor port (the port you copy the traffic to) in order that you can examine the traffic from the mirrored port without interference. Click Basic Settings > Port Mirroring to display the following screen.
Use this screen to select a monitor port and specify the traffic flow to be copied to the monitor port. Figure 32 Port Mirroring GS1510 Series User's Guide 55 Chapter 8 Port Mirroring The following table describes the labels in this screen. Table 10 Port Mirroring LABEL State Monitor to Port All Ports DESCRIPTION Select Enabled to turn on port mirroring or select Disabled to turn it off. Select the ports for which you want to monitor the traffic. Settings in this field apply to all ports. Use this field only if you want to make some settings the same for all ports. Use this field first to set the common settings and then make adjustments on a port-by-port basis. Source Port Mirror Mode This field displays the number of a port. Select Ingress, Egress or Both to only copy the ingress (incoming), egress (outgoing) or both (incoming and outgoing) traffic from the source ports to the port specified in the Monitor to Port field. Select Disable to not copy any traffic from the source ports to the port specified in the Monitor to Port field.

Click Apply to save your changes back to the Switch. Click Refresh to begin configuring this screen afresh. Apply Refresh 56 GS1510 Series User's Guide CHAPTER 9 Port Settings This chapter describes how to view and configure the port settings on the Switch. 9.1 Port Settings Use this screen to configure and view Switch port settings. Click Basic Settings > Port Settings to display the following screen. 9.1.1 Auto Negotiation Auto (auto-negotiation) allows one port to negotiate with a peer port automatically to obtain the connection speed and duplex mode that both ends support. When auto-negotiation is turned on, a port on the Switch negotiates with the peer automatically to determine the connection speed and duplex mode.
If the peer 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.

[You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide](http://yourpdfguides.com/dref/3651547)
http://yourpdfguides.com/dref/3651547

When the Switch's auto-negotiation is turned off, a 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 port are the same in order to connect. 9.1.2 Flow Control A concentration of traffic on a port decreases port bandwidth and overflows buffer memory causing packet discards and frame losses.

Flow Control is used to regulate transmission of signals to match the bandwidth of the receiving port. The Switch uses IEEE802.3x flow control in full duplex mode and backpressure flow control in half duplex mode. IEEE802.3x flow control is used in full duplex mode to send a pause signal to the sending port, causing it to temporarily stop sending signals when the receiving port memory buffers fill.

GS1510 Series User's Guide 57 Chapter 9 Port Settings Back Pressure flow control is typically used in half duplex mode to send a "collision" signal to the sending port (mimicking a state of packet collision) causing the sending port to temporarily stop sending signals and resend later. Figure 33 Port Settings 58 GS1510 Series User's Guide Chapter 9 Port Settings The following table describes the labels in this screen. Table 11 Port Settings LABEL Port Settings Port State Select a port number you want to configure on this screen. Select Enable to activate the port or Disable to deactivate the port. DESCRIPTION Speed/Duplex Select the speed and duplex mode of the port. The choices are: · · · · · · · Flow Control Auto 10 Mbps / Full Duplex 10 Mbps / Half Duplex 100 Mbps / Full Duplex 100 Mbps / Half Duplex 1000 Mbps / Full Duplex 1000 Mbps / Half Duplex Select On to enable access to buffering resources for the port thus ensuring lossless operation across network switches. Otherwise, select Off to disable it. Click Apply to save the changes back to the Switch. Click Refresh to begin configuring this screen afresh. This field displays the port number.

This field displays whether the port is enabled or disabled. Apply Refresh Port Status Port State Speed/Duplex This field displays the speed either 10M, 100M or 1000M and the duplex mode Full or Half. Flow Control Link Status This field displays whether the port's flow control is On or Off. This field displays the link status of the port. If the port is up, it displays the port's speed, duplex and flow control setting. Otherwise, it displays Link Down if the port is disabled or not connected to any device. GS1510 Series User's Guide 59 Chapter 9 Port Settings 60 GS1510 Series User's Guide PART III Advanced Settings VLAN (63) EEE (71) IGMP Snooping (73) Link Aggregation (77) Loop Guard (81) QoS (85) Storm Control (93) Spanning Tree Protocol (95) 61 62 CHAPTER 10.1 Overview 10 VLAN This chapter shows you how to configure IEEE 802.1Q tagged VLANs and portbased VLANs. 10.

2 What You Can Do · Use the Port Isolation screen (Section 10.4 on page 64) to specify which ports can communicate with each other. · Use the VLAN Settings screen (Section 10.5 on page 67) to configure a VLAN and assign member ports. · Use the Tag Settings screen (Section 10.

6 on page 68) to add a VLAN ID tag to all outgoing frames on a member port. · Use the Port Settings screen (Section 10.7 on page 69) to configure the VLAN port settings. 10.3 What You Need to Know 10.

3.1 Introduction to IEEE 802.1Q Tagged VLANs A tagged VLAN uses an explicit tag (VLAN ID) in the MAC header to identify the VLAN membership of a frame across bridges - they are not confined to the switch on which they were created. The VLANs can be created statically by hand or dynamically through GVRP. The VLAN ID associates a frame with a specific VLAN and provides the information that switches need to process the frame across the network. A tagged frame is four bytes longer than an untagged frame and contains two bytes of TPID (Tag Protocol Identifier, residing within the type/length field of the Ethernet frame) and two bytes of TCI (Tag Control Information, starts after the source address field of the Ethernet frame). GS1510 Series User's Guide 63 Chapter 10 VLAN The CFI (Canonical Format Indicator) is a single-bit flag, always set to zero for Ethernet switches. If a frame received at an Ethernet port has a CFI set to 1, then that frame should not be forwarded as it is to an untagged port. The remaining twelve bits define the VLAN ID, giving a possible maximum number of 4,096 VLANs. Note that user priority and VLAN ID are independent of each other.

A frame with VID (VLAN Identifier) of null (0) is called a priority frame, meaning that only the priority level is significant and the default VID of the ingress port is given as the VID of the frame. Of the 4096 possible VIDs, a VID of 0 is used to identify priority frames and value 4095 (FFF) is reserved, so the maximum possible VLAN configurations are 4,094. TPID User Priority CFI 1 Bit VLAN ID 12 bits 2 Bytes 3 Bits 10.3.2 Forwarding Tagged and Untagged Frames Each port on the Switch is capable of passing tagged or untagged frames. To forward a frame from an 802.1Q VLAN-aware switch to an 802.1Q VLAN-unaware switch, the Switch first decides where to forward the frame and then strips off the VLAN tag. To forward a frame from an 802.1Q VLAN-unaware switch to an 802.

1Q VLAN-aware switch, the Switch first decides where to forward the frame, and then inserts a VLAN tag reflecting the ingress port's default VID. The default PVID is VLAN 1 for all ports, but this can be changed. A broadcast frame (or a multicast frame for a multicast group that is known by the system) is duplicated only on ports that are members of the VID (except the ingress port itself), thus confining the broadcast to a specific domain. 10.4 Port Isolation Use this screen to restrict specific ports on the Switch from communicating with each other.

This screen can also be used to specify which ports will forward received packets to other ports on the Switch. 64 GS1510 Series User's Guide Chapter 10 VLAN Click Advanced Settings > VLAN > Port Isolation to display the following screen. Figure 34 Port Isolation GS1510 Series User's Guide 65 Chapter 10 VLAN The following table describes the labels in this screen. Table 12 Port Isolation LABEL Port DESCRIPTION Select a port number to configure its port isolation settings. Select All Ports to configure the port isolation settings for all ports on the Switch.

Egress Port An egress port is an outgoing port, that is, a port through which a data packet leaves. Selecting a port as an outgoing port means it will communicate with the port currently being configured. If you wish to allow two subscriber ports to talk to each other, you must define the egress port for both ports. CPU refers to the Switch management port. By default it forms a VLAN with all Ethernet ports.

You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide
http://yourpdfguides.com/dref/3651547

If it does not form a VLAN with a particular port then the Switch cannot be managed from that port. Select All/ Deselect All Click Select All to mark all ports as egress ports and permit traffic. Click Deselect All to unmark all ports and isolate them. Deselecting all ports means the port being configured cannot communicate with any other port. This will also deselect the CPU outgoing port which will disable Switch management for that port.

This option is the most limiting but also the most secure. Apply Refresh Port Isolation Status Click this to save any changes to the Switch. Click this to reload the screen and reset any changes that were just made. "V" indicates the port's packets can be sent to that port. "-" indicates the port's packets cannot be sent to that port. 66 GS1510 Series User's Guide Chapter 10 VLAN 10.5 VLAN Settings Use this screen to configure a static VLAN and assign member ports to it. Click Advanced Settings > VLAN > VLAN > VLAN Settings to display the following screen. Figure 35 VLAN Settings The following table describes the labels in this screen. Table 13 VLAN Settings LABEL VLAN ID VLAN Name DESCRIPTION Enter the VLAN ID for this entry; the valid range is between 1 and 4094.

Enter a descriptive name for the VLAN for identification purposes. This name consists of up to 64 printable characters; spaces are allowed. Member Port Enter the port numbers you want the Switch to assign to the VLAN as members. You can designate multiple port numbers individually by using a comma (,) and by range with a hyphen (-). Apply Refresh VLAN List VLAN ID VLAN Name VLAN Status This field displays the index number of the VLAN entry. Click the number to modify the VLAN. This field displays the name of the VLAN. This field displays the status of the VLAN. Static or Dynamic (802.1Q VLAN). Click this to save any changes to the Switch. Click this to reload the screen and reset any changes that were just made. Member Port This field displays which ports have been assigned as members of the VLAN. This will display None if no ports have been assigned. Action Click Delete to remove the VLAN. GS1510 Series User's Guide 67 Chapter 10 VLAN 10.6 Tag Settings Use this screen to tag any outgoing frames from a port with its assigned VLAN ID. You must first configure a VLAN (Section 10.5 on page 67) before using this screen. Click Advanced Settings > VLAN > VLAN > Tag Settings to display the following screen.

Figure 36 Tag Settings The following table describes the labels in this screen. Table 14 Tag Settings LABEL VLAN ID Tag Port DESCRIPTION Select a VLAN ID to configure its port tagging settings. Selecting a port which is a member of the selected VLAN ID will make it a tag port. This means the port will tag all outgoing frames transmitted with the VLAN ID. Click Select All to mark all member ports as tag ports. Click Deselect All to mark all member ports as untag ports. Click this to save any changes to the Switch. Click this to reload the screen and reset any changes that were just made. This field displays the VLAN ID. This field displays the ports that have been assigned as tag ports.

This field displays the ports that have been assigned as untag ports. Select All Deselect All Apply Refresh Tag Status VLAN ID Tag Ports UnTag Ports 68 GS1510 Series User's Guide Chapter 10 VLAN 10.7 Port Settings Use this screen to configure the VLAN port settings. Click Advanced Settings > VLAN > VLAN > Port Settings to display the following screen. Figure 37 Port Settings The following table describes the labels in this screen.

Table 15 Port Settings LABEL Port DESCRIPTION Select a port number to configure from the drop-down box. Select All to configure all ports at the same time. PVID Acceptable Frame Select a PVID (Port VLAN ID number) from the drop-down box. Specify the type of frames allowed on a port. Choices are All, VLAN Untagged Only or VLAN Tagged Only.

Select All from the drop-down list box to accept all untagged or tagged frames on this port. This is the default setting. Select VLAN Untagged Only to accept only untagged frames on this port. All tagged frames will be dropped. Select VLAN Tagged Only to accept only tagged frames on this port. All untagged frames will be dropped. Apply Refresh Port Status Click this to save any changes to the Switch. Click this to reload the screen and reset any changes that were just made. GS1510 Series User's Guide 69 Chapter 10 VLAN Table 15 Port Settings (continued) LABEL Port PVID Acceptable Frame DESCRIPTION This field displays the port number. This field displays the Port VLAN ID number.

This field displays the type of frames allowed on the port. This will either display All or Tag Only. 70 GS1510 Series User's Guide CHAPTER 11.1 Overview 11 EEE This chapter explains the EEE (Energy Efficient Ethernet) screen. Use this screen to reduce energy consumption over RJ-45 Ethernet Ports during idle periods. The hardware devices connected to the ports must also support EEE for this function to work. Note: A similar version of this screen appears in Smart Mode. See Section 4.3.1.

2 on page 37. 11.1.1 EEE Screen Click Advanced Settings > EEE to view the screen as shown. Figure 38 EEE The following table describes the labels in this screen.

Table 16 EEE LABEL EEE Port State Select All Deselect All DESCRIPTION Click a port to enable IEEE 802.3az Energy Efficient Ethernet on that port. Click this to enable IEEE 802.3az Energy Efficient Ethernet across all ports. all ports.

Click this to disable IEEE 802.3az Energy Efficient Ethernet across GS1510 Series User's Guide 71 Chapter 11 EEE Table 16 EEE (continued) LABEL Apply Refresh DESCRIPTION Click this to save any changes to the Switch. Click this to reload the screen and reset any changes that were just made. 72 GS1510 Series User's Guide CHAPTER 12.1 Overview 12 IGMP Snooping This chapter shows you how to configure IGMP snooping for multicast traffic. The Switch can passively snoop on IGMP packets transferred between IP multicast routers/switches and IP multicast hosts to learn the IP multicast group membership. IGMP snooping allows the Switch to learn multicast groups without you having to manually configure them. 12.2 What You Can Do · Use the General Settings screen (Section 12.4 on page 74) to enable IGMP snooping.

· Use the Port Settings screen (Section 12.5 on page 75) to enable or disable immediate leave on ports. 12.3 What You Need to Know The Switch can passively snoop on IGMP packets transferred between IP multicast routers/switches and IP multicast hosts to learn the IP multicast group membership. It checks IGMP packets passing through it, picks out the group registration information, and configures multicasting accordingly. IGMP snooping allows the Switch to learn multicast groups without you having to manually configure them.

[You're reading an excerpt. Click here to read official ZYXEL GS1510-24 user guide](http://yourpdfguides.com/dref/3651547)
http://yourpdfguides.com/dref/3651547