



Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for ZYXEL P-2602HW. You'll find the answers to all your questions on the ZYXEL P-2602HW in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual ZYXEL P-2602HW
User guide ZYXEL P-2602HW
Operating instructions ZYXEL P-2602HW
Instructions for use ZYXEL P-2602HW
Instruction manual ZYXEL P-2602HW

Prestige 2602H Series

ADSL VoIP IAD

Prestige 2602HW Series

802.11g Wireless ADSL VoIP IAD

User's Guide

Version 3.40
5/2005

ZyXEL



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Manual abstract:

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If this equipment does cause harmful interference to radio/television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: · Reorient or relocate the receiving antenna. · Increase the separation between the equipment and the receiver. · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. · Consult the dealer or an experienced radio/TV technician for help. Notice 1 Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: Antenna Warning! This device meets ETSI and FCC certification requirements when using the included antenna(s). Only use the included antenna(s). This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Certifications Go to www.zyxel.com

zyxel.com 4 Federal Communications Commission (FCC) Interference Statement Prestige 2602H/HW Series User's Guide 1 Select your product from the drop-down list box on the ZyXEL home page to go to that product's page. 2 Select the certification you wish to view from this page. Federal Communications Commission (FCC) Interference Statement 5 Prestige 2602H/HW Series User's Guide Safety Warnings For your safety, be sure to read and follow all warning notices and instructions. · To reduce the risk of fire, use only No. 26 AWG (American Wire Gauge) or larger telecommunication line cord. · 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 can service the device. Please contact your vendor for further information.

· Use ONLY the dedicated power supply for your device. Connect the power cord or power adaptor to the right supply voltage (110V AC in North America or 230V AC in Europe). · Do NOT use the device if the power supply is damaged as it might cause electrocution. · If the power supply is damaged, remove it from the power outlet. · Do NOT attempt to repair the power supply. Contact your local vendor to order a new power supply. · Place connecting cables carefully so that no one will step on them or stumble over them. Do NOT allow anything to rest on the power cord and do NOT locate the product where anyone can walk on the power cord. · If you wall mount your device, make sure that no electrical, gas or water pipes will be damaged. · Do NOT install nor use your device during a thunderstorm.

There may be a remote risk of electric shock from lightning. · Do NOT expose your device to dampness, dust or corrosive liquids. · Do NOT use this product near water, for example, in a wet basement or near a swimming pool. · Make sure to connect the cables to the correct ports. · Do NOT obstruct the device ventilation slots, as insufficient airflow may harm your device.

· Do NOT store things on the device. · Connect ONLY suitable accessories to the device. 6 Safety Warnings Prestige 2602H/HW Series User's Guide ZyXEL Limited Warranty ZyXEL warrants to the original end user (purchaser) that this product is free from any defects in materials or workmanship for a period of up to two years from the date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, ZyXEL will, at its discretion, repair or replace the defective products or components without charge for either parts or labor, and to whatever extent it shall deem necessary to restore the product or components to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be solely at the discretion of ZyXEL.

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uk ZyXEL Communications UK Ltd., 11 The Courtyard, Eastern Road, Bracknell, Berkshire, RG12 2XB, United Kingdom (UK) ftp.zyxel.co.uk a. "+" is the (prefix) number you enter to make an international telephone call. Customer Support 9 Prestige 2602H/HW Series User's Guide 10 Customer Support Prestige 2602H/HW Series User's Guide Table of Contents Copyright

.....

....

....

.....

.....

....

....

.....

.....

....

....

.....

.....

....

....

3 Federal Communications Commission (FCC) Interference Statement

..... 4 Safety Warnings

....

....

.....

.....

....

....

.....

.....

....

....

.....

.....

....

... 6 ZyXEL Limited Warranty..

.....

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

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

.....
.....

... 7 Customer Support..

.....

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

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

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

..... 8 Table of Contents ..

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

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

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

..... 11 List of Figures ...

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

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

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

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

. 29 List of Tables

.....
.....

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

.47 1.1.1 Features of the Prestige

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

*.....48 1.
1.1.1 P2602HW Wireless Features ...*

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

52 1.2 Applications for the Prestige

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

.....53 1.

2.1 Internet Access

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

53 1.2.1.1 Internet Single User Account

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

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

.54 1.2.2 Making Calls via Internet Telephony Service Provider

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

...54 1.2.3 Make Peer-to-peer Calls

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

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

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

54 1.2.4 Firewall for Secure Broadband Internet Access

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

.55 1.2.5 LAN to LAN Application

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

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

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

...55 1.

2.6 Front Panel LEDs

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

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

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

.56 Chapter 2 Introducing the Web Configurator....

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

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

.....

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

..105 5.8 Configuring RADIUS

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

.106 Chapter 6 WAN Setup.....

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

.... 109 6.

1 WAN Overview

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

.....109 6.1.1 Encapsulation .

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

.....
.....
.....
.....
.....109 6.1.

1.1 ENET ENCAP

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

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

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

109 6.1.1.2 PPP over Ethernet

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

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

.....109 6.1.1.3 PPPoA ..

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

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

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

.....109 6.

1.1.4 RFC 1483 ...

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

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

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

.....110 6.1.

2 Multiplexing

.....
.....

2 IP Assignment with RFC 1483 Encapsulation

.....

.....

.....

. 111 6.1.4.3 IP Assignment with ENET ENCAP Encapsulation .

.....

.....

... 111 6.1.

5 Nailed-Up Connection (PPP)

.....

.....

.....

.....

.....

.....

.....

.....

. 111 6.2 Metric

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.. 111 6.3 PPPoE Encapsulation ..

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....112 6.

4 Traffic Shaping

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.123 7.1.5 NAT Mapping Types ..

.....

.....

.....

.....

.....

.....

.....

.....

..123 7.2 SUA (Single User Account) Versus NAT

.....

.....

.....

.....

.....

.....

.....

.124 7.3 SUA Server

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

3.1 Default Server IP Address

.....

.....

.....

.....

.....

.....

.....

.....125 7.3.2 Port Forwarding: Services and Port Numbers ..

.....

.....

.....

.....

.....125 7.3.
3 Configuring Servers Behind SUA (Example)

.....
.....

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

..126 7.4 Selecting the NAT Mode

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

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

.....
.....

126 7.5 Configuring SUA Server

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

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

.....127 7.
6 Configuring Address Mapping

.....
.....

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

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

....129 7.7 Editing an Address Mapping Rule

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

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

...130 Chapter 8 Introduction to VoIP

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

.....
.....

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

..... 133 8.1 Introduction to VoIP ...

.....
.....

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

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

.....133 8.2 SIP ..

.....
.....

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

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

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

..133 8.2.1 SIP Identities

.....
.....

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

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

.....133 8.2.1.1 SIP Number ..

.....
.....

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

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

.133 8.2.1.2 SIP Service Domain

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

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

.....
.....134 8.

2.2 SIP Call Progression

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

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

.....134 8.2.3 SIP Servers ...

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

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

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

134 8.2.3.1 SIP User Agent ..

.....
.....

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

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

135 8.2.3.2 SIP Proxy Server

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

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

.....
.....
.....135 8.2.
3.3 SIP Redirect Server

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

.136 8.2.3.4 SIP Register Server

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

.....
.....137 8.
2.4 RTP

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

.137 8.3 SIP ALG

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

.....
.....
.....
.....
.....
.....
.....137 8.

4 Pulse Code Modulation

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

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

.....
.....137 8.

5 Voice Coding

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

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

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

.....138 8.5.1 G.711 ..

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

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

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

.....138 8.5.2 G.729 .

.....
.....

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

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

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

.....138 8.6 PSTN Call Setup Signaling ...

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

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

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

138 8.7 MWI (Message Waiting Indication)

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

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

...138 Chapter 9 Voice Screens

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

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

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

..... 139 9.1 Voice Screens Introduction ...

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

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

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

.....139 14 Table of Contents Prestige 2602H/HW Series User's Guide 9.2 SIP Settings Configuration

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

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

.....
.....

139 9.3 Advanced Voice Settings Configuration

.....

.....

.....

.....

.....

.....

.....

140 9.4 Quality of Service (QoS)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....143 9.4.

1 Type Of Service (ToS)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....143 9.4.2 DiffServ .

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....143 9.4.

2.1 DSCP and Per-Hop Behavior

.....

.....

.....

.....

.....

.....

.....143 9.4.3 VLAN .

.....

.....

.....

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

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

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

.143 9.5 QoS Configuration

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

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

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

....144 9.6 Phone

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

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

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

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

.145 9.6.1 Voice Activity Detection/Silence Suppression ..

.....

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

.....145 9.

6.2 Comfort Noise Generation

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

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

.....

.145 9.6.3 Echo Cancellation ..

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

.....145 9.7 Phone Configuration ...

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

.....145 9.8 Speed Dial

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

147 9.8.1 Peer-to-Peer Calls

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

*.....147 9.
9 Speed Dial Configuration*

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

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

.....147 9.10 Lifeline (Prestige 2602HL/HWL) ...

.....
.....

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

.....
.....

.149 9.11 Lifeline Configuration (Prestige 2602HL/HWL) ...

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

...149 9.12 Supplementary Phone Services Overview

.....
.....

.....
.....

.....150 9.12.1 The Flash Key .

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

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

.....
.....

.....151 9.12.2 Europe Type Supplementary Phone Services ..

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

.....151 9.12.2.1 European Call Hold .

.....
.....

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

.....

.....

...151 9.12.

2.2 European Call Waiting

.....

.....

.....

.....

.....

.....

.....

.....152 9.12.2.3 European Call Transfer ..

.....

.....

.....

.....

.....

.....

.....

.....

.152 9.12.2.4 European Three-Way Conference

.....

.....

.....

.....

.....

.....

152 9.12.3 USA Type Supplementary Services

.....

.....

.....

.....

.....

.....

.153 9.12.3.1 USA Call Hold .

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....153 9.12.3.2 USA Call Waiting .

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....
.153 9.12.3.3 USA Call Transfer

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

.....153 9.12.3.4 USA Three-Way Conference ..

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

...153 9.13 Common Phone Port Configuration

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

.....154 9.14 Call Forward Configuration ..

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

....155 Chapter 10 Phone Usage

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

..... 159 10.1 Dialing a Telephone Number .

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

....
.....

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

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

.....
.....

... 161 11.1 Dynamic DNS .

.....

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

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

.....
.....

.....161 11.1.1 DYNDNS Wildcard ..

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

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

.....
.....

...161 11.2 Configuring Dynamic DNS .

.....

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

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

.....161 Chapter 12 Time and Date....

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

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

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

.....
.....
..... 163 12.

1 Pre-defined NTP Time Servers List

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

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

...163 12.2 Configuring Time and Date

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

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

.163 Chapter 13 Firewalls...

.....
.....

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

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

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

... 167 13.1 Firewall Overview

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

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

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

.....167 13.2 Types of Firewalls

.....
.....
.....
.....
.....
.....169 13.4 Denial of Service ...

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

.....
.....
.....
.....
.....169 13.

4.1 Basics

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

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

.....
169 13.4.2 Types of DoS Attacks ...

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

.....
.....
.....
.....
.....170 13.4.2.

1 ICMP Vulnerability

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

.....
172 13.4.2.2 Illegal Commands (NetBIOS and SMTP) ..

.....
.....

.....
.....
....172 13.
4.2.3 Traceroute

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

.....
.....
173 13.5 Stateful Inspection

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

.....
.....
.173 13.5.1 Stateful Inspection Process ..

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

.....
.....
.....
.....
....174 13.5.2 Stateful Inspection and the Prestige

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

.....
.....
....175 13.
5.3 TCP Security

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

.....
175 13.5.4 UDP/ICMP Security

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

.....
176 13.5.5 Upper Layer Protocols ...

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

.....176 13.6 Guidelines for Enhancing Security with Your Firewall ...

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

...176 13.6.1 Security In General

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

....177 13.7 Packet Filtering Vs Firewall

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

.....
.178 13.7.1 Packet Filtering: ..

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

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

.....178 13.7.1.
1 When To Use Filtering

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

.....
.....
178 13.7.2 Firewall ...

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

.....
.....
.....
.....
.....
.....
.....
....178 13.7.2.1 When To Use The Firewall ...

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

.....
.....
.....178 Chapter 14 Firewall Configuration

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

.....
.....
.....
.....
.....
.... 181 14.1 Access Methods

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

.....181 16 Table of Contents Prestige 2602H/HW Series User's Guide 14.2 Firewall Policies Overview .

.181 14.3 Rule Logic Overview ...

...182 14.3.

1 Rule Checklist

..182 14.3.2 Security Ramifications .

.....182 14.3.

3 Key Fields For Configuring Rules

.....
.....
.....
.....
.....183 14.3.3.

1 Action

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

183 14.3.3.2 Service

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

.183 14.3.3.3 Source Address

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

....183 14.
3.3.4 Destination Address

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

183 14.4 Connection Direction Example

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

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

.....
..183 14.4.1 LAN to WAN Rules .

.....
.....

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

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

...184 14.4.2 WAN to LAN Rules

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

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

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

....184 14.4.3 Alerts

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

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

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

.....185 14.5 Configuring Basic Firewall Settings ..

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

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

.....
..185 14.6 Rule Summary ..

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

.....
.....

.....
.....

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

.....
.....

...186 14.6.

1 Configuring Firewall Rules

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

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

.....188 14.7 Customized Services .

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

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

.....
.....

....191 14.8 Creating/Editing A Customized Service

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

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

..191 14.9 Example Firewall Rule

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

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

.....
.....

.192 14.10 Predefined Services ...

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

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

..196 14.11 Anti-Probing ..

.....
.....

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

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

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

.198 14.12 DoS Thresholds

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

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

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

...199 14.12.1 Threshold Values

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

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

.....
.....

200 14.12.2 Half-Open Sessions ...

.....

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

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

...200 14.12.2.1 TCP Maximum Incomplete and Blocking Time

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

.200 Chapter 15 Content Filtering

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

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

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

..... 203 15.

1 Content Filtering Overview

.....
.....

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

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

.....203 15.2 Configuring Keyword Blocking ..

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

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

.....203 15.

3 Configuring the Schedule

.....
.....

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

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

.....204 15.4 Configuring Trusted Computers .

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

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

.....
.....205 Chapter 16 Introduction to IPSec ..

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

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

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

..... 207 16.
1 VPN Overview

.....
.....

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

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

.....
.....

..207 16.1.1 IPSec ..

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

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

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

.....207 16.1.

2 Security Association

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

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

.....
.....

..207 16.1.3 Other Terminology .

.....

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

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

.....207 16.
1.3.1 Encryption ...

.....
.....

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

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

.....207 16.1.3.2 *Data Confidentiality ..*

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

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

.....
.....

..208 16.1.3.
3 Data Integrity

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

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

.....208 16.
1.3.4 Data Origin Authentication ...

.....
.....

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

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

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

....208 16.2 IPSec Architecture

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

....209 16.2.1 IPSec Algorithms

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

.....209 16.2.

2 Key Management

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

..209 16.3 Encapsulation

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

209 16.3.1 Transport Mode

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

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

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

.....210 16.3.2 Tunnel Mode ..

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

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

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

.....210 16.4 IPSec and NAT ...

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

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

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

..210 Chapter 17 VPN Screens.....

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

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

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

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

.. 213 17.1 VPN/IPSec Overview ..

.....
.....

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

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

.....
...213 17.2 IPSec Algorithms .

.....
.....

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

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

.....
.....

.213 17.2.1 AH (Authentication Header) Protocol ..

.....

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

.....
*.....213 17.
2.2 ESP (Encapsulating Security Payload) Protocol*

.....
.....

.....
.....214 17.

3 My IP Address

.....

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

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

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

.214 17.4 Secure Gateway Address

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

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

.....

.....
215 17.4.1 Dynamic Secure Gateway Address ...

.....

.....

.....

.....

.....

.....

.....*215 17.5 VPN Summary Screen ...*

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

215 17.6 Keep Alive

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

...*217 17.7 Remote DNS Server .*

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

217 17.8 NAT Traversal

.....

.....

.....

.....

.....

.....

.....

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

.....
.....
..218 17.8.1 NAT Traversal Configuration .
.....

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

.....
.....
.....
.....
....219 17.9 ID Type and Content

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

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

.....
.....
.....
.....
.219 17.9.1 ID Type and Content Examples

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

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

...220 17.10 Pre-Shared Key

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

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

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

.....221 17.11 Editing VPN Policies ...

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

.....
.....

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

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

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

.231 17.14.1 Security Parameter Index (SPI)

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

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

231 17.15 Configuring Manual Key

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

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

232 17.16 Viewing SA Monitor

.....
.....

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

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

.....235 17.17 Configuring Global Setting ..

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

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

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

...237 17.18 Telecommuter VPN/IPSec Examples

.....

.....
.....
.....
.....242 18.
1.3 System Timeout

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

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

.....
.....242 18.
2 Telnet

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

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

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

.....242 18.3 *FTP*

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

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

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

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

.....242 18.4 *Web* .

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

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

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

245 19.2 UPnP and ZyXEL

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

..246 19.2.1 Configuring UPnP

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

.....246 19.3 Installing UPnP in Windows Example

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

.....247 19.4 Using UPnP in Windows XP Example ...

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

.....251 Chapter 20 Logs Screens....

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

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

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

.....
259 20.1 Logs Overview

.....
.....

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

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

.....
.....

.259 20.1.1 Alerts and Logs ..

.....

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

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

.....

...259 20.2 Configuring Log Settings .

.....
.....

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

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

....259 20.3 Displaying the Logs

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

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

.....

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

...262 20.4 SMTP Error Messages

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

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

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

.....262 20.4.1 Example E-mail Log .

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

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

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

..263 Chapter 21 Media Bandwidth Management Advanced Setup...

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

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

... 265 21.1 Bandwidth Management Advanced Setup Overview

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

.265 21.2 Bandwidth Classes and Filters ...

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

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

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

...265 21.3 Proportional Bandwidth Allocation

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

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

.....
.....

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

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

...273 21.9.1 Media Bandwidth Management Class Configuration

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

...274 21.9.2 Media Bandwidth Management Statistics

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

.....
276 21.10 Bandwidth Monitor

.....
.....

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

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

.....277 Chapter 22 Maintenance ...

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

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

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

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

.. 279 22.1 Maintenance Overview

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

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

.....
.....
.279 22.2 System Status Screen ...
.....

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

.....
.279 22.2.1 System Statistics ..
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....
.....282 22.3 DHCP Table Screen ...
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....
....283 22.4 Any IP Table Screen
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....
..284 22.5 Wireless Screen
.....
.....
.....
.....

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

.....285 22.5.1 Association List ..

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

...285 22.6 Diagnostic Screens

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

..286 22.6.1 Diagnostic General Screen

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

.286 22.6.2 Diagnostic DSL Line Screen ..

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

...286 22.7 Firmware Screen .

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

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

.288 Chapter 23 Introducing the SMT

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

... 291 23.1 Introduction to the SMT

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

.291 23.1.1 Procedure for SMT Configuration via Telnet ..

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

.....291 23.

1.2 Entering Password

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

.291 23.2 Navigating the SMT Interface

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

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

.....292 23.2.1 System Management Terminal Interface Summary ...

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

.....293 23.2.2 SMT Menus Overview .

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

...294 23.3 Changing the System Password

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

..295 Chapter 24 Menu 1 General Setup

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

. 297 24.1 General Setup

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

.....297 24.2 Procedure To Configure Menu 1 .

.....

.....
.....

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

.....
.....

.....297 24.2.1 Procedure to Configure Dynamic DNS .

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

.....298 20 Table of Contents Prestige 2602H/HW Series User's Guide Chapter 25 Menu 2 WAN Backup Setup ..

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

.....
.....

..... 301 25.1 Introduction to WAN Backup Setup .

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

...301 25.2 Configuring WAN Backup in Menu 2

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

.....301 25.2.1 Traffic Redirect Setup ..

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

.....
.....

...302 Chapter 26 Menu 3 LAN Setup

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

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

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

..... 305 26.1 LAN Setup .

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

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

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

.....

.....305 26.1.1 General Ethernet Setup ..

.....
.....

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

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

.....305 26.2 Protocol Dependent Ethernet Setup

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

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

.....305 26.3 TCP/IP Ethernet Setup and DHCP .

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

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

...306 Chapter 27 Wireless LAN Setup

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

..... 309 27.1 Wireless LAN Overview ...

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

.....309 27.2 Wireless LAN Setup .

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

.....309 27.2.1 Wireless LAN MAC Address Filter ..

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

....310 Chapter 28 Internet Access

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

.....
... 313 28.1 Internet Access Overview

.....
.....

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

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

...313 28.2 IP Policies

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

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

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

.....313 28.3 IP Alias ...

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

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

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

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

....313 28.



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<http://yourpdfguides.com/dref/2434188>

4 IP Alias Setup

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

..314 28.5 Route IP Setup

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

.....315 28.6 Internet Access Configuration .

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

.316 Chapter 29 Remote Node Configuration

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

319 29.1 Remote Node Setup Overview

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

.....
.....
.....
...319 29.2 Remote Node Setup

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

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

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

319 29.2.1 Remote Node Profile

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

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

.....319 29.2.

2 Encapsulation and Multiplexing Scenarios

.....
.....

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

...320 29.2.2.1 Scenario 1: One VC, Multiple Protocols

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

....320 29.2.2.2 Scenario 2: One VC, One Protocol (IP)

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

.....
.....

320 29.2.2.3 Scenario 3: Multiple VCs

.....
.....

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

.....320 29.

2.3 Outgoing Authentication Protocol

.....
.....

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

.....
.....
.....
.....
...327 Chapter 30 Static Route Setup

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

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

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

..... 329 30.1 IP Static Route Overview .

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

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

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

...329 30.2 Configuration .

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

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

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

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

.....329 Chapter 31 Bridging Setup ...

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

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

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

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

..... 333 31.1 Bridging in General .

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

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

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

.....333 31.2 Bridge Ethernet Setup ..

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

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

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

..333 31.2.1 Remote Node Bridging Setup

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

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

.....333 31.2.2 Bridge Static Route Setup .

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

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

.....
.....

...335 Chapter 32 Network Address Translation (NAT) ..

.....
.....

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

.....

..... 337 32.1 Using NAT

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

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

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

.....337 32.1.

1 SUA (Single User Account) Versus NAT

.....
.....

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

.....337 32.2 Applying NAT ...

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

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

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

.....337 32.3 NAT Setup

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

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

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

.....
.....

..339 32.3.1 Address Mapping Sets .

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

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

...339 32.3.1.1 SUA Address Mapping Set

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

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

...340 32.3.1.2 User-Defined Address Mapping Sets

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

.....

...341 32.3.

1.3 Ordering Your Rules

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

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

.....341 32.

4 Configuring a Server Behind NAT

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

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

.....343 32.5 General NAT Examples ...

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

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

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

.....344 32.

5.1 Example 1: Internet Access Only

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

.....
.....

.....
.....345 32.

5.2 Example 2: Internet Access with an Inside Server

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

..345 32.5.3 Example 3: Multiple Public IP Addresses With Inside Servers

.....

..346 32.5.4 Example 4: NAT Unfriendly Application Programs .

.....

.....

.....

.....

350 Chapter 33 Enabling the Firewall

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

. 353 33.1 Remote Management and the Firewall

.....

.....

.....

.....

.....

.....

.....

353 33.2 Access Methods

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

....353 33.3 Enabling the Firewall

.....

.....

.....

.....

.....

.....

.....

.....

.....
.....
.....
.....
.....
.353 Chapter 34 Filter Configuration

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

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

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

..... 355 34.1 About Filtering

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

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

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

..355 34.1.1 The Filter Structure of the Prestige

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

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

.....356 34.

2 Configuring a Filter Set for the Prestige

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

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

.....357 22 Table of Contents Prestige 2602H/HW Series User's Guide 34.3 Filter Rules Summary Menus ..

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

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

.....

.358 34.4 Configuring a Filter Rule ...

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

..359 34.4.1 TCP/IP Filter Rule

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

.....360 34.4.2 Generic Filter Rule ...

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

..362 34.5 Filter Types and NAT ..

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

...364 34.6 Example Filter .

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

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

.....
.....
...369 35.2 Supported MIBs .
.....

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

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

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

.370 35.3 SNMP Configuration

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

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

.....
.....

...370 35.4 SNMP Traps .
.....

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

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

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

.....371 Chapter 36 System Security ..

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

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

.....
.....

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

..... 379 37.1 Overview ...

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

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

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

.379 37.2 System Status

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

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

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

.....379 37.3 System Information .

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

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

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

.....381 37.3.1 System Information .

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

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

.....
.....

.....381 37.3.
2 Console Port Speed

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

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

.....382 37.4 Log and Trace .

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

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

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

.....
.....

383 37.4.1 Viewing Error Log ...

.....

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

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

.....383 37.4.
2 Syslog and Accounting

.....
.....

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

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

.....384 37.5 Diagnostic

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

....391 Table of Contents 23 Prestige 2602H/HW Series User's Guide 38.2.3 Example of FTP Commands from the Command Line

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

.391 38.2.4 GUI-based FTP Clients

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

.392 38.2.5 TFTP and FTP over WAN Management Limitations ..

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

..392 38.2.6 Backup Configuration Using TFTP .

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

.....393 38.

2.7 TFTP Command Example

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

....393 38.2.8 GUI-based TFTP Clients

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

.....393 38.3 Restore Configuration ...

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

5 TFTP File Upload

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

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

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

..398 38.4.6 TFTP Upload Command Example

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

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

399 Chapter 39 System Maintenance.....

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

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

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

.. 401 39.1 Command Interpreter Mode

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

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

.....401 39.2 Call Control Support .

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

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

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

.....402 39.2.1 Budget Management ..

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

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

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

....402 39.3 Time and Date Setting

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

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

.....
.....

....403 39.

3.1 Resetting the Time

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

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

.404 Chapter 40 Remote Management

.....
.....

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

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

.. 407 40.1 Remote Management Overview ..

.....
.....

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

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

..407 40.2 Remote Management

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

...407 40.2.

1 Remote Management Setup

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

....407 40.2.2 Remote Management Limitations ...

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

....408 40.3 Remote Management and NAT

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

....409 40.4 System Timeout

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

.....409 Chapter 41 IP Policy Routing.

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

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

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

.....
.....

.. 411 41.1 IP Policy Routing Overview ..

.....

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

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

...411 41.2 Benefits of IP Policy Routing

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

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

.....
.....

*...411 41.
3 Routing Policy*

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

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

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

.....411 41.4 IP Routing Policy Setup ...

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

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

.....
.....

...412 41.5 Applying an IP Policy .

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

...415 41.

5.1 Ethernet IP Policies

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

...415 41.6 IP Policy Routing Example

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

..416 24 Table of Contents Prestige 2602H/HW Series User's Guide Chapter 42 Call Scheduling

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

.. 419 42.1 Introduction

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

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

.....
...419 Chapter 43 VPN/IPSec Setup ..

.....
.....

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

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

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

. 423 43.1 VPN/IPSec Overview

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

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

.....
.....

..423 43.2 IPSec Summary Screen ..

.....

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

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

*.....424 43.
3 IPSec Setup*

.....
.....

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

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

.....

.....
...426 43.
4 IKE Setup

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

...430 43.5 Manual Setup

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

.....
.432 43.5.1 Active Protocol ..

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

.....432 43.
5.2 Security Parameter Index (SPI)

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

.....
.432 Chapter 44 SA Monitor

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

..445 45.4.1.
3 Java Permissions

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

..447 45.5 Telephone Problems

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

.....449 Appendix A Product Specifications .

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

..... 451 Prestige 2602H/HW Series Power Adaptor Specifications

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

.. 455 Appendix B Setting up Your Computer's IP Address.....

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

.. 457 Windows 95/98/Me.....

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

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

..... 457 *Configuring* .

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

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

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

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

. 459 *Verifying Settings*

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

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

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

.... 460 *Windows 2000/NT/XP*

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

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

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

..... 460 *Verifying Settings*

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

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

.....

..... 468 Appendix C IP Subnetting

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

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

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

..... 469 IP Addressing.

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

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

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

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

..... 469 IP Classes

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

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

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

..... 469 Subnet Masks .

.....
.....

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

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

.....
.....
.....
..... 470 Subnetting ..

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

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

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

.....
.....
... 470 Example: Two Subnets ..

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

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

.....
.....
... 471 Example: Four Subnets..

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

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

.....
.....
... 473 Example Eight Subnets ..

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

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

.....
.....

... 474 Subnetting With Class A and Class B Networks. .

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

475 Appendix D PPPoE

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

..... 477 PPPoE in Action.....

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

. 477 Benefits of PPPoE....

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

.... 477 Traditional Dial-up Scenario

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

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

.....
.....
.. 477 How PPPoE Works ...
.....

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

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

.....
.....
.....
... 478 Prestige as a PPPoE Client

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

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

.....
.....
. 478 Appendix E Wireless LANs
.....

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

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

.....
.....
.....
..... 479 Wireless LAN Topologies ..

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

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

.....

.....
.....
..... 479 Ad-hoc Wireless LAN Configuration

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

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

..... 479 BSS.

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

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

... 479 ESS.....

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

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

.. 480 Channel..

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

.....
.....
. 481 RTS/CTS
.....
.....

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

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

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

... 481 Fragmentation Threshold

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

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

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

482 Preamble Type

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

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

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

... 483 IEEE 802.1x .

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

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

. 484 RADIUS.....

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

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

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.....
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..... 484 Types of RADIUS Messages

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

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

484 Types of Authentication.....

.....
.....

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

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

485 EAP-MD5 (Message-Digest Algorithm 5)

.....
.....

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

..... 485 EAP-TLS (Transport Layer Security)

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

.....
.....

.....
.....

..... 486 EAP-TTLS (Tunneled Transport Layer Service) .

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

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

..... 486 PEAP (Protected EAP)

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

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

.... 486 26 Table of Contents Prestige 2602H/HW Series User's Guide LEAP.

.....

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

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

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

. 486 Dynamic WEP Key Exchange

.....
.....

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

.....
.....
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.... 486 WPA

.....
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.....

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

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

.....
.....
.....
.....
.....
... 487 User Authentication

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

. 487 Encryption

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

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

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

.... 487 Security Parameters Summary

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

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

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

.. 488 Appendix F Triangle Route

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

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

.....

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

.... 489 *The Ideal Setup*.....

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

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

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

.....
.....

. 489 *The "Triangle Route" Problem*....

.....

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

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

..... 489 *The "Triangle Route" Solutions*

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

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

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

.... 490 *IP Aliasing*

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

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.....
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.....
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.... 490 *Gateways on the WAN Side.*

.....

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.....
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.....

493 Internal SPTGEN File Modification - Important Points to Remember

.... 493 Internal SPTGEN FTP Download Example.....

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

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

.... 494 Internal SPTGEN FTP Upload Example

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

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

..... 495 Command Examples..

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

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

.. 516 Appendix H Command Interpreter...

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

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... 519 Command Syntax..

.....
.....

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

.. 519 Command Usage

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

.....
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.....

.....
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. 519 Appendix I Firewall Commands

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

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

.....
.....
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.... 521 Sys Firewall Commands

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

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

.....
.....
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.. 521 Appendix J Boot Commands

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

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

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

.....
523 Appendix K Log Descriptions.....

.....
.....

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

... 525 Log Commands..

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.....
.....

.....
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534 Configuring What You Want the Prestige to Log

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

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534 Displaying Logs

.....

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.. 55 Figure 5 Prestige LAN-to-LAN Application

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... 56 Figure 6 P2602H-C Series Front Panel

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.....

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..... 56 Figure 7 P2602HW-C Series Front Panel ..

.....

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.....

.....

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56 Figure 8 Password Screen

.....

.....

.....

.....

.....

.....

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.....

.....

..... 60 Figure 9 Change Password at Login

.....

.....

.....

.....

.....

.....

.....
.....
60 Figure 10 Web Configurator SITE MAP Screen
.....

.....
.....
.....
.....
.....
.....
..... 62 Figure 11 Wizard Setup: First Screen

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

.....
.... 65 Figure 12 Internet Connection with PPPoE .
.....
.....
.....
.....
.....

.....
.... 67 Figure 13 Internet Connection with RFC 1483 .
.....
.....
.....
.....
.....

.....
..... 68 Figure 14 Internet Connection with ENET ENCAP ..
.....
.....
.....

.....
..... 68 Figure 15 Internet Connection with PPPoA
.....

.....
.....
.....
.....
.....
.....
.....
..... 69 Figure 16 Wizard Setup: Third Screen

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

. 101 Figure 36 Wireless LAN: 802.1x/WPA: WPA ...

103 Figure 37 Wireless LAN: 802.1x/WPA:WPA-PSK ...

..... 104 List of Figures 29 Prestige 2602H/HW Series User's Guide Figure 38 Local User Database

... 105 Figure 39 RADIUS

106 Figure 40 Example of Traffic Shaping

..... 113 Figure 41 WAN Setup (PPPoE) ..

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

..... 114 Figure 42 Traffic Redirect Example

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

..... 117 Figure 43 Traffic Redirect LAN Setup ...

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

117 Figure 44 WAN Backup

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

118 Figure 45 How NAT Works

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

123 Figure 46 NAT Application With IP Alias

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

.....
.....
.....
.... 123 Figure 47 Multiple Servers Behind NAT Example .
.....
.....
.....
.....
.....

.... 126 Figure 48 NAT Mode

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

..... 127 Figure 49 Edit SUA/NAT Server Set ..

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

... 128 Figure 50 Address Mapping Rules ..

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

. 129 Figure 51 Address Mapping Rule Edit

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

..... 130 Figure 52 SIP User Agent ..

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

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

.... 135 Figure 53 SIP Proxy Server

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

..... 136 Figure 54 SIP Redirect Server ...

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

. 137 Figure 55 SIP Settings

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

.. 139 Figure 56 Voice Advanced Setup ...

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

.. 141 Figure 57 DiffServ: Differentiated Service Field

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

..... 143 Figure 58 QoS

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

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

..... 144 Figure 59 Phone .

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

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

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

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

146 Figure 60 Speed Dial

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

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

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

.... 148 Figure 61 Lifeline

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

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

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.....

.....

.....

.....

... 150 Figure 62 Phone Port Common

.....

.....

.....

.....

.....

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.....

154 Figure 63 Voice Call Forward

.....

.....

.....

.....

.....

.....

.....

.....

. 156 Figure 64 Dynamic DNS

.....

.....

.....

.....

.....

.....

.....

.....

..... 162 Figure 65 Time and Date .

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... 164 Figure 66 Prestige Firewall Application ...

.....

.....

.....

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

... 169 *Figure 67 Three-Way Handshake ..*

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

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

..... 171 *Figure 68 SYN Flood ...*

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

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

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

. 171 *Figure 69 Smurf Attack*

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

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

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

. 172 *Figure 70 Stateful Inspection*

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

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

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

... 174 *Figure 71 LAN to WAN Traffic*

.....
.....

.....
.....

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

... 184 *Figure 72 WAN to LAN Traffic ..*

.....
.....

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

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

... 184 *Figure 73 Firewall: Default Policy*

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

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

.....
.....

... 185 *Figure 74 Firewall: Rule Summary ..*

.....

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

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

187 *Figure 75 Firewall: Edit Rule*

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

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

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

.. 189 *Figure 76 Firewall: Customized Services*

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

.....
.....
.....
.....
.....
.....
..... 191 Figure 77 Firewall: Configure Customized Services

.....
.....
.....
.....
.....
.....
. 192 Figure 78 Firewall Example: Rule Summary

.....
.....
.....
.....
.....
.....
..... 193 Figure 79 Firewall Example: Edit Rule: Destination Address .

.....
.....
.....
.....
.....
.....
. 194 Figure 80 Edit Custom Port Example

.....
.....
.....
.....
194 30 List of Figures Prestige 2602H/HW Series User's Guide Figure 81 Firewall Example: Edit Rule: Select Customized Services

.....
.....
.....
.....
.....
.....
195 Figure 82 Firewall Example: Rule Summary: My Service

.....
.....
.....
.....
.....
.....
.. 196 Figure 83 Firewall: Anti Probing ...

.....
.....
.....
.....
.....
.....
.... 199 Figure 84 Firewall: Threshold

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

..... 201 *Figure 85 Content Filter: Keyword*

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

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

..... 204 *Figure 86 Content Filter: Schedule* ..

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

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

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

205 *Figure 87 Content Filter: Trusted*

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

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

..... 206 *Figure 88 Encryption and Decryption*

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

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

..... 208 *Figure 89 IPSec Architecture* .

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

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

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

.....
..... 209 Figure 90 Transport and Tunnel Mode IPSec Encapsulation
.....
.....

..... 210 Figure 91 IPSec Summary Fields ..
.....
.....
.....
.....
.....

.....
.....
.....
.....
.....
.....
..... 215 Figure 92 VPN Summary

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

.....
.....
..... 216 Figure 93 VPN Host using Intranet DNS Server Example .
.....

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

..... 218 Figure 94 NAT Router Between IPSec Routers

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

.....
.....

..... 218 Figure 95 VPN IKE .

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

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

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

..... 222 Figure 96 Two Phases to Set Up the IPSec SA

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

.... 227 Figure 97 VPN IKE: Advanced Setup .

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

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

..... 229 Figure 98 VPN: Manual Key ...

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

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

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

232 Figure 99 VPN: SA Monitor

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

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

.... 236 Figure 100 VPN: Global Setting .

.....
.....

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

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

. 237 Figure 101 Telecommuters Sharing One VPN Rule Example

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

... 238 Figure 102 Telecommuters Using Unique VPN Rules Example

.....

.....
.....

. 239 Figure 103 Telnet Configuration on a TCP/IP Network

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

.....
... 242 Figure 104 Remote Management ..

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

..... 243 Figure 105 Configuring UPnP ...

.....
.....
.....

.....
.....
.....

.....
.. 246 Figure 106 Add/Remove Programs: Windows Setup: Communication ...

.....

..... 248 Figure 107 Add/Remove Programs: Windows Setup: Communication: Components 248 Figure 108 Network Connections

.....
.....
.....

.....
.....
.....

.....
.....
.....

249 Figure 109 Windows Optional Networking Components Wizard

.....
.....
.....

.. 250 Figure 110 Networking Services ...

.....
.....
.....
.....

.....
.....
.....

... 251 Figure 111 Network Connections

.....
.....
.....

.....
.....
.....

.....
.....

... 252 Figure 112 Internet Connection Properties ..

.....
.....
.....
.....

.....
.....

.. 253 Figure 113 Internet Connection Properties: Advanced Settings ...

.....
.....
.....

254 Figure 114 Internet Connection Properties: Advanced Settings: Add

.....

..... 254 Figure 115 System Tray Icon

.....
.....
.....

.....
.....
.....

.....
.....

..... 255 Figure 116 Internet Connection Status

.....
.....
.....

.....
.....
.....

... 255 Figure 117 Network Connections

.....
.....
.....

.....
.....
.....

.....

.....
... 256 Figure 118 Network Connections: My Network Places ..

.....

.....

.....

.....

.....

257 Figure 119 Network Connections: My Network Places: Properties: Example 257 Figure 120 Log Settings ..

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... 260 Figure 121 View Logs ...

.....

.....

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.....

..... 262 Figure 122 E-mail Log Example .

.....

.....

.....

.....

.....

.....

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.....

.....

.....

..... 264 List of Figures 31 Prestige 2602H/HW Series User's Guide Figure 123 Application-based Bandwidth Management Example

.....

.....

.....

.. 266 Figure 124 Subnet-based Bandwidth Management Example

.....

.....

.....

.... 267 Figure 125 Application and Subnet-based Bandwidth Management Example

267 Figure 126 Bandwidth Allotment Example

.....

.....

.....
.....
.....
.....

. 269 *Figure 127 Maximize Bandwidth Usage Example*

.....
.....

.....
.....

. 270 *Figure 128 Bandwidth Borrowing Example*

.....
.....
.....

.....
.....

. 271 *Figure 129 Media Bandwidth Management: Summary*

.....
.....
.....

... 272 *Figure 130 Media Bandwidth Management: Class Setup*

.....
.....

. 273 *Figure 131 Media Bandwidth Management: Class Configuration*

.....
.....

..... 274 *Figure 132 Media Bandwidth Management Statistics* ...

.....
.....

.....
.....

277 *Figure 133 Media Bandwidth Management: Monitor*

.....
.....
.....

.... 278 *Figure 134 System Status*

.....
.....
.....
.....
.....

.....
.....
.....
.....

280 *Figure 135 System Status: Show Statistics*

.....
.....
.....

.....
.....
.....
.....

282 *Figure 136 DHCP Table*

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

..... 284 *Figure 137 Any IP Table* .

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

..... 284 *Figure 138 Association List* ..

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

.. 285 *Figure 139 Diagnostic: General*

.....
.....
.....
.....

.....
.....

.....
.....

..... 286 Figure 140 Diagnostic: DSL Line .

.....
.....

.....
.....
.....

.....
.....

.... 287 Figure 141 Firmware Upgrade

.....
.....
.....

.....
.....
.....

... 288 Figure 142 Network Temporarily Disconnected ..

.....
.....

.....
.....
.....

..... 289 Figure 143 Error Message

.....
.....

.....
.....
.....

.....
.....
.....

. 289 Figure 144 Login Screen

.....
.....

.....
.....
.....

.....
.....

..... 292 Figure 145 Menu 23.

1 Change Password

.....
.....
.....
.....
.....
.....
.....

.. 296 Figure 146 Menu 1 General Setup .



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.....
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.....

298 *Figure 147 Menu 1.1 Configure Dynamic DNS*

.....

.....
.....
.....
.....

..... 299 *Figure 148 Menu 2 WAN Backup Setup .*

.....
.....
.....

.....
.....
.....
.....

... 301 *Figure 149 Menu 2.1 Traffic Redirect Setup .*

.....
.....

.....
.....
.....
.....

.... 302 *Figure 150 Menu 3 LAN Setup .*

.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 305 *Figure 151 Menu 3.1 LAN Port Filter Setup*

.....
.....
.....

.....
.....
.....
.....

... 305 *Figure 152 Menu 3.2 TCP/IP and DHCP Ethernet Setup*

.....

.....
.....
.....
.....

316 Figure 160 Menu 11 Remote Node Setup

.....
.....
.....
.....

.. 320 Figure 161 Menu 11.1 Remote Node Profile

.....
.....
.....
.....

321 Figure 162 Menu 11.3 Remote Node Network Layer Options

.....
.....
.....
.....

.. 323 Figure 163 Sample IP Addresses for a TCP/IP LAN-to-LAN Connection

..... 325 Figure 164 Menu 11.5 Remote Node Filter (RFC 1483 or ENET Encapsulation) .. 326 Figure 165 Menu 11.5 Remote Node Filter (PPPoA or PPPoE Encapsulation) 326 32 List of Figures Prestige 2602H/HW Series User's Guide Figure 166 Menu 11.6 for VC-based Multiplexing

.....
.....
.....
.....

..... 327 Figure 167 Menu 11.6 for LLC-based Multiplexing or PPP Encapsulation

.....
..... 327 Figure 168 Menu 11.1 Remote Node Profile

.....
.....
.....
.....

... 328 Figure 169 Menu 11.8 Advance Setup Options .

.....
.....
.....
.....
.....

.. 328 Figure 170 Sample Static Routing Topology ...

.....
.....
.....
.....
.....

329 Figure 171 Menu 12 Static Route Setup

.....
.....
.....
.....
.....

.... 330 Figure 172 Menu 12.
1 IP Static Route Setup

.....
.....
.....
.....

.. 330 Figure 173 Menu 12.1.1 Edit IP Static Route .

.....
.....
.....
.....

.. 330 Figure 174 Menu 11.1 Remote Node Profile ..

.....
.....
.....
.....

. 334 Figure 175 Menu 11.3 Remote Node Network Layer Options ...

.....
.....

... 334 Figure 176 Menu 12.3.
1 Edit Bridge Static Route

.....
.....
.....
.....

..... 335 Figure 177 Menu 4 Applying NAT for Internet Access

.....
.....

.....
343 Figure 185 Menu 15.2 NAT Server Setup ...

.....
.....

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344 Figure 186 Multiple Servers Behind NAT Example .

.....
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.. 344 Figure 187 NAT Example 1

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..... 345 Figure 188 Menu 4 Internet Access & NAT Example

.....
.....
.....
.....

.....
. 345 Figure 189 NAT Example 2

.....
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.....

..... 346 Figure 190 Menu 15.2.1 Specifying an Inside Server ...

.....
.....
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. 346 Figure 191 NAT Example 3

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347 Figure 192 Example 3: Menu 11.3

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..... 348 Figure 193 Example 3: Menu 15.

1.1.1

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..... 348 Figure 194 Example 3: Final Menu 15.

1.1
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.. 349 Figure 195 Example 3: Menu 15.2 ..

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..... 350 Figure 196 NAT Example 4

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.....
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.....

... 358 Figure 205 IGMP Filter Rules Summary

.....
.....
.....
.....

..... 358 Figure 206 Menu 21.1.x.x TCP/IP Filter Rule .

.....
.....
.....
.....

..... 360 Figure 207 Executing an IP Filter

.....
.....
.....
.....

362 Figure 208 Menu 21.1.5.1 Generic Filter Rule ..

.....
.....
.....
.....

..... 363 List of Figures 33 Prestige 2602H/HW Series User's Guide Figure 209 Protocol and Device Filter Sets ...

.....
.....
.....
.....

..... 364 Figure 210 Sample Telnet Filter ...

.....
.....
.....
.....

.....
.....

371 Figure 217 Menu 23 System Security

.....
.....
.....
.....
.....
.....
.....

..... 373 Figure 218 Menu 23 System Security

.....
.....
.....
.....
.....
.....
.....

... 373 Figure 219 Menu 23.2 System Security: RADIUS Server .

.....
.....
.....
.....
.....

.. 374 Figure 220 Menu 23 System Security

.....
.....
.....
.....
.....
.....
.....

375 Figure 221 Menu 23.4 System Security: IEEE802.1x

.....
.....
.....
.....
.....

. 375 Figure 222 Menu 14 Dial-in User Setup

.....
.....
.....
.....
.....
.....
.....

. 378 Figure 223 Menu 14.1 Edit Dial-in User

.....
.....
.....
.....
.....
.....

..... 378 Figure 224 Menu 24 System Maintenance ...

.....
.....
.....

..... 379 Figure 225 Menu 24.1 System Maintenance: Status ..

.....
.....
.....

... 380 Figure 226 Menu 24.2 System Information and Console Port Speed .

.....
.....

.... 381 Figure 227 Menu 24.2.1 System Maintenance: Information

.....
.....
.....

382 Figure 228 Menu 24.2.2 System Maintenance: Change Console Port Speed ...

.... 383 Figure 229 Menu 24.

3 System Maintenance: Log and Trace

.....
.....
.....

.. 383 Figure 230 Sample Error and Information Messages

.....
.....
.....

..... 384 Figure 231 Menu 24.3.2 System Maintenance: Syslog and Accounting ..

.....
.....

.... 384 Figure 232 Syslog Example

.....
.....
.....

.....
.....
.....

.. 385 Figure 233 Menu 24.4 System Maintenance: Diagnostic ..

.....
.....

.....
.....
.....

..... 386 Figure 234 Telnet in Menu 24.5 ..

.....
.....
.....

.....
.....
.....

.....
.....

. 391 Figure 235 FTP Session Example

.....
.....
.....

.....
.....
.....

..... 392 Figure 236 Telnet into Menu 24.

6
.....
.....

.....
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.....

.....
.....

395 Figure 237 Restore Using FTP Session Example

.....
.....
.....

..... 395 Figure 238 Telnet Into Menu 24.7.1 Upload System Firmware ...

.....
.....
.....

..... 396 Figure 239 Telnet Into Menu 24.7.2 System Maintenance ..

.....
.....
.....

.... 397 Figure 240 FTP Session Example of Firmware File Upload .

.....
.....
.....

.....
.....

... 398 Figure 241 Command Mode in Menu 24 ..

.....
.....

.....
.....
.....

.. 401 Figure 242 Valid Commands

.....
.....
.....

.....
.....
.....

.... 401 Figure 243 Menu 24.
9 System Maintenance: Call Control

.....
.....
.....

.. 402 Figure 244 Menu 24.9.1 System Maintenance: Budget Management

... 402 Figure 245 Menu 24 System Maintenance ..

.....
.....
.....
.....

... 403 Figure 246 Menu 24.10 System Maintenance: Time and Date Setting .

.....
.....

.. 404 Figure 247 Menu 24.11 Remote Management Control

.....
.....
.....

408 Figure 248 Menu 25 IP Routing Policy Setup

.....
.....
.....
.....

. 412 Figure 249 Menu 25.1 IP Routing Policy Setup ...

.....
.....
.....
.....

..... 418 Figure 257 Menu 26 Schedule Setup ...

.....
.....

.....
.....
.....

.....

. 419 Figure 258 Menu 26.1 Schedule Set Setup ...

.....
.....
.....
.....

.....

420 Figure 259 Applying Schedule Set(s) to a Remote Node (PPPoE)

.....

..... 421 Figure 260 VPN SMT Menu Tree ..

.....
.....

.....
.....
.....

.....
.....

... 423 Figure 261 Menu 27 VPN/IPSec Setup

.....
.....
.....

.....
.....
.....

..... 424 Figure 262 Menu 27.

1 IPSec Summary

.....
.....

.....
.....
.....

..... 424 Figure 263 Menu 27.1.1 IPSec Setup ...

.....
.....

.....
.....

..... 443 Figure 269 Internet Options

.....
.....
.....

.....
.....
.....

.....
.....
.....

..... 444 Figure 270 Pop-up Blocker Settings ..

.....
.....
.....

.....
.....
.....

..... 445 Figure 271 Internet Options ..

.....
.....
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.....
.....
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.....
.....

. 446 Figure 272 Security Settings - Java Scripting

.....
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.....
.....

..... 447 Figure 273 Security Settings - Java ...

.....
.....
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.....
.....
.....

..... 448 Figure 274 Java (Sun) ..

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.....
.....

..... 489 Figure 297 "Triangle Route" Problem ...

.....
.....
.....
.....
.....

..... 490 Figure 298 IP Alias

.....
.....
.....
.....

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.....
.....

..... 490 Figure 299 Gateways on the WAN Side

.....
.....
.....

.....
.....
.....

..... 491 Figure 300 Configuration Text File Format: Column Descriptions ..

.....
.....
.....

..... 493 Figure 301 Invalid Parameter Entered: Command Line Example

.....
.....
.....

..... 494 Figure 302 Valid Parameter Entered: Command Line Example

.....
.....
.....

..... 494 Figure 303 Internal SPTGEN FTP Download Example .

.....
.....
.....

..... 495 Figure 304 Internal SPTGEN FTP Upload Example .

.....
.....
.....

495 *Figure 305 Option to Enter Debug Mode*

.....
.....
.....

... 523 *Figure 306 Boot Module Commands ..*

.....
.....
.....

..... 524 *Figure 307 Displaying Log Categories Example ...*

.....
.....
.....

.... 534 *Figure 308 Displaying Log Parameters Example .*

.....
.....
.....

535 *Figure 309 Log Command Example*

.....
.....
.....

536 36 *List of Figures Prestige 2602H/HW Series User's Guide List of Tables Table 1 Models Covered*

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.....
.....

.....
.....
.....
.....
.....
.....
.. 47 Table 2 ADSL Standards ...
.....

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.....
*.... 48 Table 3 IEEE 802.
11g*

.....
.....
.....
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.....

.....
.. 52 Table 4 P2602H/HW-C Series Front Panel LEDs ...
.....

.....
.....
.....
.....

..... 56 Table 5 Web Configurator Screens Summary

.....
.....
.....
.....
.....
.....

. 62 Table 6 Wizard Setup: First Screen

.....
.....
.....
.....
.....
.....

.. 66 Table 7 Internet Connection with PPPoE ...

.....

.....
.....
.....
.....

... 67 Table 8 Internet Connection with RFC 1483 ..

.....
.....
.....
.....

68 Table 9 Internet Connection with ENET ENCAP

.....
.....
.....
.....

. 69 Table 10 Internet Connection with PPPoA

.....
.....
.....
.....

. 70 Table 11 Wizard Setup: Voice Configuration

.....
.....
.....
.....

..... 71 Table 12 Wizard Setup: LAN Configuration ..

.....
.....
.....
.....

..... 74 Table 13 Media Bandwidth Mgmt. Wizard Setup: Services ..

.....
.....
.....
.....

.... 76 Table 14 Media Bandwidth Mgmt. Wizard Setup: First Screen

.....
.....
.....

..... 77 Table 15 Media Bandwidth Mgmt. Wizard Setup: Second Screen

.....
.....
.....

. 78 Table 16 Password

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

..... 79 Table 17 LAN Setup ...

.....
.....
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.....
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.....
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.....
.....
.....
.....

. 88 Table 18 LAN: Static DHCP

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.... 89 Table 19 Wireless LAN

.....
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.....
.....
.....
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.....

.... 94 Table 20 MAC Address Filter

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.....

.....
.....
.....
.....

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.....
.....

.... 96 Table 21 Wireless LAN: 802.1x/WPA: No Access/Authentication

.....
.....
.....

100 Table 22 Wireless LAN: 802.1x/WPA: 802.1x

.....
.....
.....
.....

.....
.....

.. 101 Table 23 Wireless LAN: 802.1x/WPA: WPA ..

.....
.....
.....
.....
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.....
.....

. 103 Table 24 Wireless LAN: 802.1x/WPA: WPA-PSK ...

.....
.....
.....
.....

..... 104 Table 25 Local User Database ...

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.....

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.....
.....

..... 105 Table 26 RADIUS

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... 106 Table 27 WAN Setup

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..... 114 Table 28 WAN Backup

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..... 118 Table 29 NAT Definitions

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... 121 Table 30 NAT Mapping Types

.....
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.....
.....
.....
.....
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.. 124 Table 31 Services and Port Numbers

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.....
.....
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125 Table 32 NAT Mode

.....
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..... 127 Table 33 Edit SUA/NAT Server Set

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. 128 Table 34 Address Mapping Rules

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.....
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..... 129 Table 35 Address Mapping Rule Edit

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..... 131 Table 36 SIP Call Progression

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..... 134 Table 37 SIP Settings

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..... 140 Table 38 Voice Advanced Setup ...

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.. 141 List of Tables 37 Prestige 2602H/HW Series User's Guide Table 39 QoS ...

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..... 144 Table 40 Phone

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..... 146 Table 41 Speed Dial ...

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. 148 Table 42 Lifeline

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. 150 Table 43 European Flash Key Commands

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. 151 Table 44 USA Flash Key Commands

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..... 153 Table 45 Voice Common .

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..... 154 Table 46 Voice Call Forward

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.....
.. 156 Table 47 Dynamic DNS ...

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.....
. 162 Table 48 Pre-defined NTP Time Servers

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.....
.... 163 Table 49 Time and Date .

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.....
.. 164 Table 50 Common IP Ports ...

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.....
170 Table 51 ICMP Commands That Trigger Alerts

.....
.....
.....
.....
.....

... 172 Table 52 Legal NetBIOS Commands

.....
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.....
.....

. 172 Table 53 Legal SMTP Commands

.....
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.....
.....

.. 173 Table 54 Firewall: Default Policy

.....
.....
.....
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.....
.....

..... 185 Table 55 Rule Summary ...

.....
.....
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.....
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..... 187 Table 56 Firewall: Edit Rule

.....
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.....
.....

..... 190 Table 57 Customized Services ..

.....
.....
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.....

..... 191 Table 58 Firewall: Configure Customized Services

.....

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.....
.....

..... 192 Table 59 Predefined Services

.....
.....
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.....

..... 196 Table 60 Firewall: Anti Probing

.....
.....
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..... 199 Table 61 Firewall: Threshold .

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201 Table 62 Content Filter: Keyword

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.... 204 Table 63 Content Filter: Schedule .

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..... 205 Table 64 Content Filter: Trusted ...

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... 206 Table 65 VPN and NAT ..

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.. 211 Table 66 AH and ESP ...

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... 214 Table 67 VPN Summary ..

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.....
. 216 Table 68 Local ID Type and Content Fields ...

.....
.....

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.....
.....

..... 220 Table 69 Peer ID Type and Content Fields .

.....
.....
.....

.....
.....
.....

..... 220 Table 70 Matching ID Type and Content Configuration Example ..

.....
.....
.....

.... 220 Table 71 Mismatching ID Type and Content Configuration Example

.....
.....

.... 221 Table 72 VPN IKE

.....
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.....

. 223 Table 73 VPN IKE: Advanced Setup

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..... 243 Table 80 Configuring UPnP .

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.. 247 Table 81 Log Settings

.....
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.... 261 38 List of Tables Prestige 2602H/HW Series User's Guide Table 82 View Logs

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.....

..... 262 Table 83 SMTP Error Messages .

.....
.....
.....
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.....
.....
.....

.... 263 Table 84 Application and Subnet-based Bandwidth Management Example

... 267 Table 85 Media Bandwidth Management: Summary

.....
.....
.....
.....
.....

.....
... 272 Table 86 Media Bandwidth Management: Class Setup ..

.....

.....

.....

.....

..... 273 Table 87 Media Bandwidth Management: Class Configuration .

.....

.....

.....

..... 274 Table 88 Services and Port Numbers ..

.....

.....

.....

.....

.....

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..... 276 Table 89 Media Bandwidth Management Statistics

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... 277 Table 90 Media Bandwidth Management: Monitor

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. 278 Table 91 System Status

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281 Table 92 System Status: Show Statistics

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.. 282 Table 93 DHCP Table ...

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.... 284 Table 94 Any IP Table .

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284 Table 95 Association List

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.. 285 Table 96 Diagnostic: General ...

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.. 286 Table 97 Diagnostic: DSL Line

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.....
287 Table 98 Firmware Upgrade

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.....

.....
.. 288 Table 99 Navigating the SMT Interface ...

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.....
.....
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.....
.....

.. 292 Table 100 SMT Main Menu ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
293 Table 101 Main Menu Summary

.....
.....

.....
.....
.....
.....

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.....
.....

..... 293 Table 102 SMT Menus Overview

.....
.....
.....
.....

.....
.....
.....
.....

..... 294 Table 103 Menu 1 General Setup .

.....

.....
.....

.....
.....
.....
.....

.....
.....
.....

.. 298 Table 104 Menu 1.1 Configure Dynamic DNS

.....
.....
.....
.....

.....
.....

.. 299 Table 105 Menu 2 WAN Backup Setup ...

.....
.....
.....
.....
.....

.....
.....
.....

.. 301 Table 106 Menu 2.1 Traffic Redirect Setup

.....
.....
.....
.....

.....
.....
.....

... 302 Table 107 DHCP Ethernet Setup

.....
.....
.....
.....

.....
.....
.....
.....

..... 306 Table 108 TCP/IP Ethernet Setup ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

307 Table 109 Menu 3.5 - Wireless LAN Setup

.....
.....
.....
.....

309 *Table 110 Menu 3.5.1 WLAN MAC Address Filtering*

.....
.....
.....
.....

..... 311 *Table 111 Menu 3.2.1 IP Alias Setup ...*

.....
.....
.....

.....
.....
.....
.....

..... 315 *Table 112 Menu 4 Internet Access Setup*

.....

.....
.....
.....
.....

..... 317 *Table 113 Menu 11.1 Remote Node Profile .*

.....

.....
.....
.....
.....

..... 321 *Table 114 Menu 11.3 Remote Node Network Layer Options .*

.....

.....
.....
.....

..... 323 *Table 115 Menu 11.8 Advance Setup Options*

.....
.....
.....
.....

..... 328 *Table 116 Menu 12.1.1 Edit IP Static Route ..*

.....

.....

.....
.....
.....
.....

372 Table 131 Menu 23.2 System Security: RADIUS Server

.....
.....
.....

..... 374 Table 132 Menu 23.
4 System Security: IEEE802.1x

.....
.....

.....
.....
.....

..... 376 Table 133 Menu 14.1 Edit Dial-in User ...

.....
.....
.....
.....

.....
.....
.....
.....

... 378 Table 134 Menu 24.1 System Maintenance: Status

.....
.....
.....

.....
.....
.....

380 Table 135 Menu 24.2.1 System Maintenance: Information

.....
.....
.....

..... 382 Table 136 Menu 24.3.2 System Maintenance: Syslog and Accounting .

.....
.....
.....

384 Table 137 Menu 24.4 System Maintenance Menu: Diagnostic

.....
.....
.....

387 Table 138 Filename Conventions

.....
.....
.....

.....
.....
.....

.....
.....
.....

..... 390 Table 139 General Commands for GUI-based FTP Clients .

.....
.....

.....
.....
... 392 Table 140 General Commands for GUI-based TFTP Clients

.....
.....
.....

..... 394 Table 141 Menu 24.9.1 System Maintenance: Budget Management ...

.....
.....

..... 403 Table 142 Menu 24.10 System Maintenance: Time and Date Setting ..

.....
.....
.....

404 Table 143 Menu 24.



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<http://yourpdfguides.com/dref/2434188>

11 Remote Management Control

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....

.....

..... 408 Table 144 Menu 25.

1 IP Routing Policy Setup

....

....

.....

.....

....

.....

... 413 Table 145 Menu 25.1.1 IP Routing Policy ...

.....

....

....

.....

.....

....

.....

..... 414 Table 146 Menu 26.1 Schedule Set Setup ..

.....

....

....

.....

.....

....

.....

..... 420 Table 147 Menu 27.1 IPSec Summary .

.....

....

....

.....

.....

....

....

.....

..... 424 Table 148 Menu 27.1.1 IPSec Setup ...

....

....

.....

.....

....

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....

427 Table 149 Menu 27.1.1.1 IKE Setup ..

.....

.....

....

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.....
.....
..... 431 Table 150 Active Protocol: Encapsulation and Security Protocol ...

.....
.....
.....
..... 432 Table 151 Menu 27.1.1.2 Manual Setup

.....
.....
.....
.....
.....
.....
.....
..... 433 Table 152 Menu 27.

2 SA Monitor

.....
.....
.....
.....
.....
.....
.....
.....
.....
..... 436 Table 153 Troubleshooting Starting Up Your Prestige .

.....
.....
.....
..... 439 Table 154 Troubleshooting the LAN ...

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.....
.....
.....
.....
.....
.....
.....
.....
..... 439 Table 155 Troubleshooting the WAN ...

.....
.....
.....
.....
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.....
.....
..... 440 Table 156 Troubleshooting Accessing the Prestige

.....
.....

.....
.....
.....

.. 441 Table 157 Troubleshooting Telephone

.....
.....
.....

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.....
.....

..... 449 Table 158 Device Specifications ..

.....
.....
.....

.....
.....
.....

.....
.....
.....

.... 451 Table 159 Firmware Specifications

.....
.....
.....

.....
.....
.....

..... 452 Table 160 Prestige 2602H/HW Series Power Adaptor Specifications

.....
.....

..... 455 Table 161 Classes of IP Addresses

.....
.....
.....

.....
.....
.....

..... 469 Table 162 Allowed IP Address Range By Class

.....
.....
.....

.....
.....
.....

..... 470 Table 163 "Natural" Masks ...

.....
.....
.....

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470 Table 164 Alternative Subnet Mask Notation

.....

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. 471 Table 165 Two Subnets Example

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471 Table 166 Subnet 1

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..... 472 Table 167 Subnet 2

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472 40 List of Tables Prestige 2602H/HW Series User's Guide Table 168 Subnet 1

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473 Table 169 Subnet 2

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473 Table 170 Subnet 3

.....
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.....

.....
.....
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.....

.....
.....
.....

..... 473 Table 171 Subnet 4

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.....
.....

474 Table 172 Eight Subnets

.....
.....
.....
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.....
.....

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.....

..... 474 Table 173 Class C Subnet Planning ...

.....
.....
.....

..... 474 Table 174 Class B Subnet Planning ...

.....
.....

.....
.....
.....

.. 475 Table 175 IEEE 802.11g ..

.....
.....
.....

.....
.....
.....

. 483 Table 176 Comparison of EAP Authentication Types

.....
.....
.....
.....

487 Table 177 Wireless Security Relational Matrix

.....
.....

.... 488 Table 178 Abbreviations Used in the Example Internal SPTGEN Screens Table . 495 Table 179 Menu 1 General Setup (SMT Menu 1)

.....
.....
.....

.....
... 496 Table 180 Menu 3 (SMT Menu 3) .

.....
.....
.....
.....
.....

..... 496 Table 181 Menu 4 Internet Access Setup (SMT Menu 4) ...

.....
.....
.....

... 499 Table 182 Menu 12 (SMT Menu 12)

.....
.....
.....
.....
.....

.... 501 Table 183 Menu 15 SUA Server Setup (SMT Menu 15) .

.....
.....
.....

... 505 Table 184 Menu 21.1 Filter Set #1 (SMT Menu 21.1)

.....
.....
.....

..... 507 Table 185 Menu 21.1 Filer Set #2, (SMT Menu 21.1)

.....
.....
.....

.. 510 Table 186 Menu 23 System Menus (SMT Menu 23)

.....
.....
.....

..... 515 Table 187 Menu 24.11 Remote Management Control (SMT Menu 24.11) .

.....
.....

. 516 Table 188 Command Examples

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..... 516 Table 189 Sys Firewall Commands ...

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... 521 Table 190 System Maintenance Logs ..

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..... 525 Table 191 System Error Logs

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526 Table 192 Access Control Logs

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.. 526 Table 193 TCP Reset Logs

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..... 527 Table 194 Packet Filter Logs

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. 527 Table 195 ICMP Logs

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... 527 Table 196 CDR Logs ..

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. 528 Table 197 PPP Logs

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..... 528 Table 198 UPnP Logs

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..... 529 Table 199 Content Filtering Logs

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529 Table 200 Attack Logs

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. 529 Table 201 802.1X Logs ...

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. 530 Table 202 ACL Setting Notes

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. 531 Table 203 ICMP Notes

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. 531 Table 204 Syslog Logs

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. 532 Table 205 SIP Logs

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..... 532 Table 206 RTP Logs

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533 Table 207 FSM Logs: Caller Side

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· The Prestige 2602HW series may be referred to as the Prestige in this user's guide. This refers to both models (ADSL over POTS and ADSL over ISDN) unless specifically identified. 44 Preface Prestige 2602H/HW Series User's Guide Graphics Icons Key Prestige Computer Notebook Computer Server Switch Router Telephone DSLAM Trunking Gateway Firewall Wireless Signal Introduction to DSL DSL (Digital Subscriber Line) technology enhances the data capacity of the existing twistedpair wire that runs between the local telephone company switching offices and most homes and offices. While the wire itself can handle higher frequencies, the telephone switching equipment is designed to cut off signals above 4,000 Hz to filter noise off the voice line, but now everybody is searching for ways to get more bandwidth to improve access to the Web hence DSL technologies. There are actually seven types of DSL service, ranging in speeds from 16 Kbits/sec to 52 Mbits/sec.

The services are either symmetrical (traffic flows at the same speed in both directions), or asymmetrical (the downstream capacity is higher than the upstream capacity). Asymmetrical services (ADSL) are suitable for Internet users because more information is usually downloaded than uploaded. For example, a simple button click in a web browser can start an extended download that includes graphics and text. Introduction to DSL 45 Prestige 2602H/HW Series User's Guide As data rates increase, the carrying distance decreases.



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That means that users who are beyond a certain distance from the telephone company's central office may not be able to obtain the higher speeds. A DSL connection is a point-to-point dedicated circuit, meaning that the link is always up and there is no dialing required. Introduction to ADSL It is an asymmetrical technology, meaning that the downstream data rate is much higher than the upstream data rate. As mentioned, this works well for a typical Internet session in which more information is downloaded, for example, from Web servers, than is uploaded. ADSL operates in a frequency range that is above the frequency range of voice services, so the two systems can operate over the same cable. 46 Introduction to DSL Prestige 2602H/HW Series User's Guide CHAPTER 1 Getting To Know Your Prestige This chapter describes the key features and applications of your Prestige. 1.1 Introducing the Prestige The Prestige 2602H/HL/HW/HWL-C are ADSL VoIP IADs (Integrated Access Device) with a built-in switch. They combine high-speed Internet access and Voice over IP (VoIP) communication capabilities. They allow you to use a traditional analog telephone to make Internet calls. By integrating DSL and NAT, the Prestige provides ease of installation and Internet access.

The Prestige is also a complete security solution with a robust firewall and content filtering. At the time of writing, this guide covers the following Prestige models (this guide abbreviates "Prestige" to "P" in the model name as in P2602H for example). Table 1 Models Covered P2602H-61C P2602H-63C P2602H-67C P2602HW-61C P2602HW-63C P2602HW-67C P2602HL-61C P2602HL-63C P2602HL-67C P2602HWL-61C P2602HWL-63C P2602HWL-67C In the Prestige product name, "H" denotes an integrated 4-port hub and "W" denotes wireless functionality. The P2602HW has an embedded mini-PCI module for IEEE 802.11g wireless LAN connectivity. Note: All wireless features in this guide pertain to the P2602HW/HWL series only. "L" denotes models that include the PSTN (Public Switched Telephone Network) lifeline feature. PSTN lifeline lets you have VoIP phone service and PSTN phone service at the same time. Models ending in "1", for example P2602HW-61, denote a device that works over the analog telephone system, POTS (Plain Old Telephone Service). Models ending in "3" denote a device that works over ISDN (Integrated Services Digital Network).

Models ending in "7" denote a device that works over T-ISDN (UR-2). Note: Only use firmware for your Prestige's specific model. Refer to the label on the bottom of your Prestige. Chapter 1 Getting To Know Your Prestige 47 Prestige 2602H/HW Series User's Guide The built-in Ethernet switch consists of four auto-negotiating 10/100BASE-T, auto-crossover RJ-45 ports (either a crossover or straight-through Ethernet cable can be used) for connecting to your local computers. Note: The Prestige is ideal for high-speed Internet browsing and making LAN-to-LAN connections to remote networks.

The Prestige is an ADSL router compatible with the ADSL/ADSL2/ADSL2+ standards. Maximum data rates attainable by the Prestige for each standard are shown in the next table. Table 2 ADSL Standards STANDARD ADSL ADSL2 ADSL2+ UPSTREAM DATA RATE 832 kbps 1 Mbps 1 Mbps DOWNSTREAM DATA RATE 8 Mbps 12 Mbps 24 Mbps Note: The standard your ISP supports determines the maximum upstream and downstream speeds attainable. Actual speeds attained also depend on the distance from your ISP, line quality, etc. The web browser-based Graphical User Interface (GUI) provides easy management.

1.1.1 Features of the Prestige The following sections describe the features of the Prestige. Built-in Switch The 10/100 Mbps auto-negotiating Ethernet ports allow the Prestige to detect the speed of incoming transmissions and adjust appropriately without manual intervention. It allows data transfer of either 10 Mbps or 100 Mbps in either half-duplex or full-duplex mode depending on your Ethernet network. The ports are also auto-crossover (MDI/MDI-X) meaning they automatically adjust to either a crossover or straight-through Ethernet cable. High Speed Internet Access Your Prestige ADSL/ADSL2/ADSL2+ router can support downstream transmission rates of up to 24Mbps and upstream transmission rates of 1 Mbps. Actual speeds attained depend on ISP DSLAM environment. PSTN Lifeline ("L" Models Only) The Prestige "L" models allow you to connect a PSTN line. You can receive incoming PSTN phone calls even while someone else connected to the Prestige is making VoIP phone calls.

You can dial a (prefix) number to make an outgoing PSTN call. You can still make PSTN phone calls if the Prestige loses power. 48 Chapter 1 Getting To Know Your Prestige Prestige 2602H/HW Series User's Guide Zero Configuration Internet Access Once you connect and turn on the Prestige, it automatically detects the Internet connection settings (such as the VCI/VPI numbers and the encapsulation method) from the ISP and makes the necessary configuration changes. In cases where additional account information (such as an Internet account user name and password) is required or the Prestige cannot connect to the ISP, you will be redirected to web screen(s) for information input or troubleshooting. Any IP The Any IP feature allows a computer to access the Internet and the Prestige without changing the network settings (such as IP address and subnet mask) of the computer, when the IP addresses of the computer and the Prestige are not in the same subnet. Auto-provisioning Your voice service provider can automatically update your Prestige's configuration via an auto-provisioning server. Auto Firmware Upgrade The Prestige gives you the option to upgrade to a newer firmware version if it finds one during auto-provisioning. Your voice service provider must have an auto-provisioning server and a server set up with firmware in order for this feature to work. Firewall The Prestige is a stateful inspection firewall with DoS (Denial of Service) protection. By default, when the firewall is activated, all incoming traffic from the WAN to the LAN is blocked unless it is initiated from the LAN.

The Prestige firewall supports TCP/UDP inspection, DoS detection and prevention, real time alerts, reports and logs. Note: You can configure most features of the Prestige via SMT but we recommend you configure the firewall and content filters using the web configurator. IPsec VPN Capability Establish a Virtual Private Network (VPN) to connect with business partners and branch offices using data encryption and the Internet to provide secure communications without the expense of leased site-to-site lines. The Prestige VPN is based on the IPsec standard and is fully interoperable with other IPsec-based VPN products. The Prestige supports up to 20 simultaneous IPsec connections.

Network Address Translation (NAT) Network Address Translation (NAT) allows the translation of an Internet protocol address used within one network (for example a private IP address used in a local network) to a different IP address known within another network (for example a public IP address used on the Internet).



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