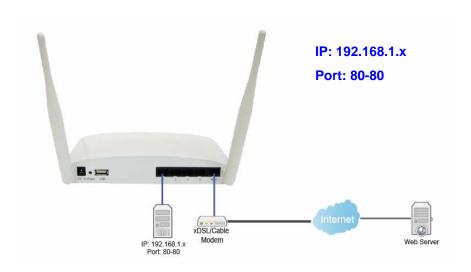
Comment	You can add comments for this regulation.	
Apply Changes & Reset	Click on <b>Apply Changes</b> to save the setting data. Or you may click on <b>Reset</b> to clear all the input data.	
Current Filter Table	It will display all ports that are filtering now.	
Delete Selected & Delete All	Click <b>Delete Selected</b> will delete the selected item. Click <b>Delete All</b> will delete all items in this table.	
Reset	You can click <b>Reset</b> to cancel.	

Port 80 has been blocked as the following illustrate.



### 5.2.2 IP Filtering

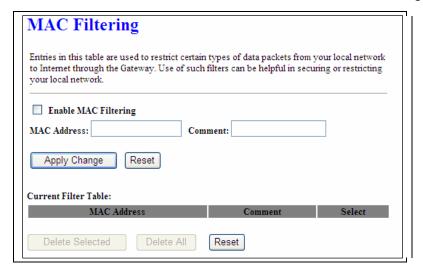
When enabled, LAN clients are blocked / filtered from accessing the Internet based on their IP addresses.



Item	Description	
Enable IP Filtering	Please select Enable IP Filtering to filter IP addresses.	
Local IP Address	Please enter the IP address that needs to be filtered.	
Protocol	Please select the protocol type of the IP address	
Comment	You can add comments for this regulation.	
Apply Changes & Reset	Click on <b>Apply Changes</b> to save the setting data. Or you may click on <b>Reset</b> to clear all the input data.	
Current Filter Table	It will display all ports that are filtering now.	
Delete Selected & Delete All	Click <b>Delete Selected</b> will delete the selected item. Click <b>Delete All</b> will delete all items in this table.	
Reset	You can click <b>Reset</b> to cancel.	

### 5.2.3 MAC Filtering

When enabled, filtering will be based on the MAC address of LAN computers. Any computer with its MAC address on this list will be blocked from accessing the Internet.

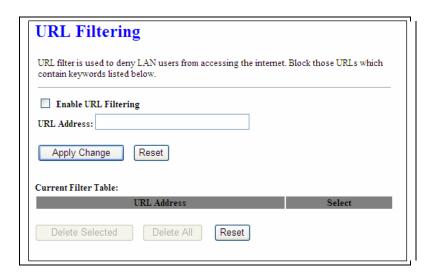


Item	Description	
Enable MAC Filtering	Please select Enable MAC Filtering to filter MAC addresses.	
MAC Address	Please enter the MAC address that needs to be filtered.	
Comment	You can add comments for this regulation.	
Apply Changes & Reset	Click on <b>Apply Changes</b> to save the setting data. Or you may click on <b>Reset</b> to clear all the input data.	
Current Filter Table	It will display all ports that are filtering now.	
Delete Selected & Delete	Click <b>Delete Selected</b> will delete the selected item. Click <b>Delete All</b>	

All	will delete all items in this table.	
Reset	You can click <b>Reset</b> to cancel.	

### 5.2.4 URL Filtering

URL Filtering is used to restrict users to access specific websites in internet



Item	Description		
Enable URL Filtering	Please select Enable MAC Filtering to filter MAC addresses		
URL Address	Please enter the MAC address that needs to be filtered.		
Apply Changes & Reset	Click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data.		
Current Filter Table	It will display all ports that are filtering now.		
Delete Selected & Delete All  Click Delete Selected will delete the selected item. Click Delete will delete all items in this table.			
Reset	You can click <b>Reset</b> to cancel.		

Notes: This function will not be in effect when the Virtual Server is enabled. Please disable Virtual Server before activate the URL Filtering function.

### 5.2.5 QoS

The QoS can let you classify Internet application traffic by source/destination IP address and port number.

To assign priority for each type of application and reserve bandwidth can let you have a better experience in using critical real time services like Internet phone, video conference ...etc.

### QoS

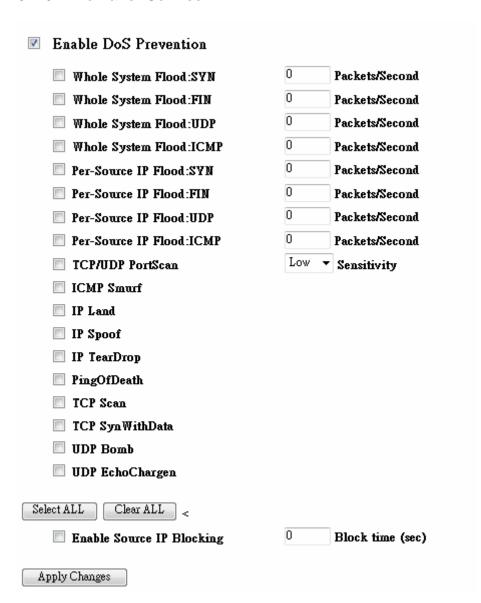
Entries in this table improve your onli traffic is prioritized over other network	ne gaming experience by ensuring that your gan k traffic, such as FTP or Web.
■ Enable QoS	
Automatic Uplink Speed	
Manual Uplink Speed (Kbps): 51	2
☑ Automatic Downlink Speed	
Manual Downlink Speed (Kbps):	512
QoS Rule Advanced Settings:	
Address Type:	⊚ IP
Local IP Address:	-
MAC Address:	
Mode:	Guaranteed minimum bandwidth
Uplink Bandwidth (Kbps):	
Downlink Bandwidth (Kbps):	
Comment:	
Apply Change Reset	
Current QoS Rules Table:	
Local IP MAC Address Mode	Uplink Downlink Bandwidth Bandwidth Comment Select (Kbps) (Kbps)
Delete Selected Delete All	Reset

Item	Description	
Enable QoS	Check "Enable QoS" to enable QoS function for the WAN port. You also can uncheck "Enable QoS" to disable QoS function for the WAN port.	
Automatic uplink speed / Manual Uplink Speed	Set the uplink speed by manual to assign the download or upload bandwidth by the unit of Kbps or check the Automatic uplink speed.	
Automatic downlink speed / Manual Downlink Speed / Manual Downlink Speed		

QoS Rule Advance Setting:			
Address Type	Set QoS by IP Address or MAC address		
Local IP Address	Set local IP Address if the address type is by IP Address		
MAC Address	Set MAC Address if the address type is by MAC Address		
Mode	Select Guaranteed minimum bandwidth or Restricted maximum bandwidth		
Bandwidth	Key in the bandwidth.		
Comment	Write your comment here.		

Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

### 5.2.6 Denial of Service



Item	Description	
Enable DoS Prevention	Check "Enable DoS Prevention" to enable DoS function for prevention. You also can uncheck ""Enable DoS Prevention" to disable DoS function.	

### 5.2.7 VLAN Settings

### **VLAN Settings**

Entries in below table are used to config vlan settings. VLANs are created to provide the segmentation services traditionally provided by routers. VLANs address issues such as scalability, security, and network management.

### Enable VLAN

Enable	Ethernet/Wireless	WAN/LAN	Tag	VID(1~4090)	Priority	CIF
<b>V</b>	Ethernet Port1	LAN		3022	7 🔻	<b>V</b>
	Ethernet Port2	LAN		3030	0 🔻	<b>V</b>
	Ethernet Port3	LAN		500	3 ▼	<b>V</b>
	Ethernet Port4	LAN		1	0 🔻	<b>▼</b>
	Wireless 1 Primanry AP	LAN		1	0 🔻	<b>V</b>
	Virtual AP1	LAN		1	0 🔻	<b>▼</b>
	Virtual AP2	LAN		1	0 🔻	<b>▼</b>
	Virtual AP3	LAN		1	0 🔻	<b>▼</b>
	Virtual AP4	LAN		1	0 🔻	<b>V</b>
	Wireless 2 Primary AP	LAN		1	0 🔻	<b>V</b>
	Virtual AP1	LAN		0	0 🔻	<b>V</b>
	Virtual AP2	LAN		0	0 🔻	<b>V</b>
	Virtual AP3	LAN		0	0 🔻	<b>V</b>
	Virtual AP4	LAN		0	0 🔻	<b>▼</b>
	Ethernet Port5	LAN		0	0 🔻	<b>V</b>

Apply Change Reset

Item	Description	
Tag	Add VLAN tag to packet	
VID	Set VLAN ID(1~4096)	
Priority	It indicates the frame priority level. Values are from 0 (best effort) 7 (highest); 1 represents the lowest priority	
CIF	Enable or Disable CIF	

### 5.3 Server Setup

### **5.3.1** FTP

### FTP Server You can enabled or disabled FTP server function in this page. Enable FTP Server: Enabled Disabled Enable Anonymous to Login: Enabled Disabled Enable FTP Access from WAN: Enabled Disabled 21 FTP Server Port: Idle Connection Time-Out: 300 Seconds(MIN: 60 default: 300) Apply Changes Reset **User Account List: User Name** Opened Directory / File Status

Item	Description	
Enable FTP Server	FTP server start or stop	
Enable Anonymous to Login	Agree anonymous account login to FTP server	
Enable FTP Access from WAN	Allow user access device FTP server from WAN side (internet)	
FTP Server Port	Default FTP server port is 21	
Idle Connection Time-Out	FTP process should have an idle timeout, which will terminate the process and close the control connection if the server is inactive (i.e., no command or data transfer in progress) for a long period of time	

### **5.3.2** Webcam server

# WebCam Server You can enabled or disabled WebCAM server function in this page. USB Port information: USB 1 - Logitech webcam Enable Webcam: Enabled Disabled Access from WAN: Enabled Disabled Connection Port: 8080 Preview Record Setting Apply Changes Reset

1. USB port information

Show Link webcam information

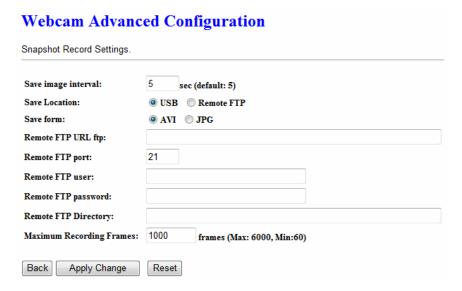
2. Enabling webcam

Enable or disable the webcam

3. Control from the WAN side

Whether to allow viewing webcam images from the WAN

- 4. Port webcam
- 5. Connection port view webcam
- 6. View live webcam video watch
- 7. Record Setup



### Recording interval

How often take an image

### Video Storage

Providing native USB storage device and a remote FTP server for storing images taken

### image format

Provide two formats AVI and JPG

### remote FTP location

If the captured image saved to a remote FTP location, be Zhen into a remote FTP location

### Remote FTP Port

FTP port used by remote

### remote FTP login account

Login account used by the remote FTP

### remote FTP Password

Login password used by the remote FTP

### folder location remote FTP Login

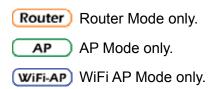
Login to remote FTP server can be set after the folder location used by

maximum amount of shooting: How many files in one folder

Note: a JPG file size is about 13KB, and AVI file size is about 45127KB (when maximum recording frames is 1000), file size may vary due to webcam models have different sizes

### **Chapter 6** Advanced Setup

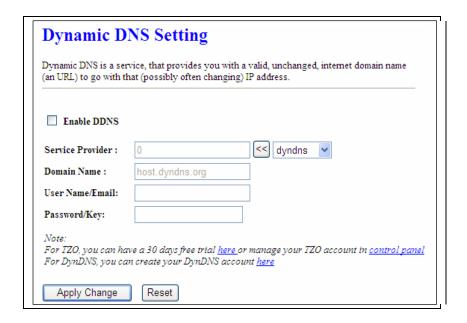
You can find advanced settings in this section.



### 6.1 Dynamic DNS Setting Router

You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. This is the way Internet users can access the router through a domain name instead of its IP address.

Note: make sure that you have registered with a DDNS service provider before enabling this feature.

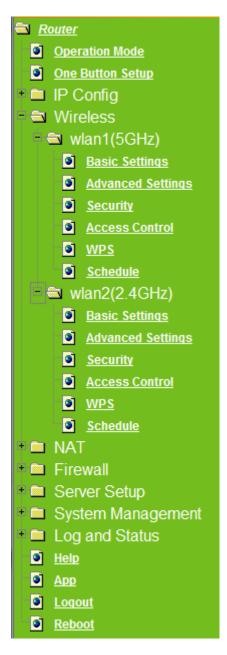


Please enter Domain Name, User Name/Email, and Password/Key. After entering, click on Apply Changes to save the setting, or you may click on Reset to clear all the input data.

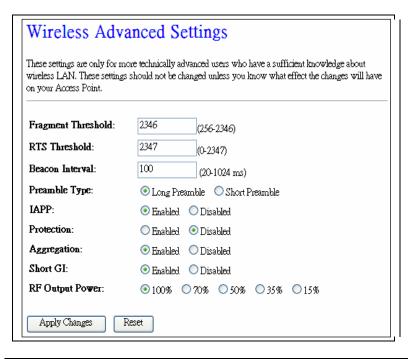
Item	Description
Enable/Disable DDNS	Select enable to use DDNS function. Each time your IP address to WAN is changed, and the information will be updated to DDNS service provider automatically.
Service Provider	Choose correct Service Provider from drop-down list, here including DynDNS, TZO, ChangeIP, Eurodns, OVH, NO-IP, ODS, Regfish embedded in GS293d.

User Name/Email	User name is used as an identity to login Dynamic-DNS service.	
Password/Key	Password is applied to login Dynamic-DNS service.	
Apply Changes & Reset	Click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data.	

### 6.2 Wireless Advanced Setup



In Advanced Settings page, more 802.11 related parameters are tunable.



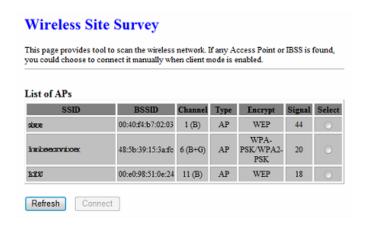
Item	Description	
Fragment Threshold	To identify the maxima length of packet, the over length packet will be fragmentized. The allowed range is 256-2346, and default length is 2346.	
RTS Threshold	This value should remain at its default setting of 2347. The range is 0~2347. Should you encounter inconsistent data flow, only minor modifications are recommended. If a network packet is smaller than the present RTS threshold size, the RTS/CTS mechanism will not be enabled. The router sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission. Fill the range from 0 to 2347 into this blank.	
Beacon Interval	Beacons are packets sent by an access point to synchronize a wireless network. Specify a beacon interval value. The allowed setting range is 20-1024 ms	
Preamble Type	PLCP is Physical layer convergence protocol and PPDU is PLCP protocol data unit during transmission, the PSDU shall be appended to a PLCP preamble and header to create the PPDU. It has 2 options: Long Preamble and Short Preamble.	
IAPP	Inter-Access Point Protocol is a recommendation that describes an optional extension to IEEE 802.11 that provides wireless access-point communications among multivendor systems.	
Protection	Please select to enable wireless protection or not.	
Aggregation	Enable this function will combine several packets to one and transmit it. It can reduce the problem when mass packets are transmitting.	
Short GI	Users can get better wireless transmission efficiency when they enable this function.	
RF Output Power	Users can adjust RF output power to get the best wireless network environment. Users can choose from 100%, 70%, 50%, 35%, and	

	15%.
Apply Changes & Reset	Click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data.

### 6.2.1 Wireless Site Survey WiFi-AP

This function provides users to search existing wireless APs or wireless base stations from ISP. You can connect to a wireless AP manually in Wi-Fi AP mode. The designed AP will appear on SSID column in Wireless Basic Setup page.

Please click on Refresh to refresh the list. Click Connect after select an existing AP to connect.



### 6.2.2 WPS Router AP

This page allows user to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client atomically synchronize it's setting and connect to the Access Point in a minute without any hassle. GS293d could support both Self-PIN or PBC modes, or use the WPS button (at real panel) to easy enable the WPS function.

**PIN model,** in which a PIN has to be taken either from a sticker label or from the web interface of the WPS device. This PIN will then be entered in the AP or client WPS device to connect.

**PBC model,** in which the user simply has to push a button, either an actual or a virtual one, on both WPS devices to connect.

Please follow instructions below to enable the WPS function.

### 1. Setup Wireless LAN with WPS PIN:

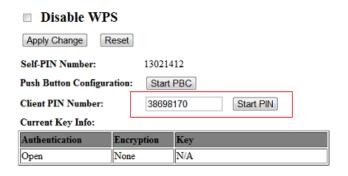
(1). Get the WPS PIN number from wireless card and write it down.



(2). Fill in the PIN number from the wireless card in Client PIN Number field, and then click "Start PIN".

### Wi-Fi Protected Setup

This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Access Point in a minute without any hassle.

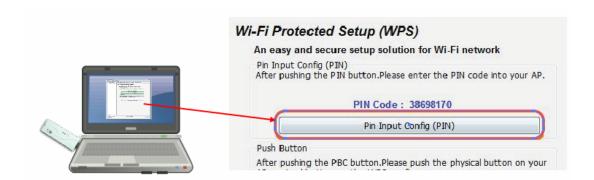


### Applied client's PIN successfully!

You have to run Wi-Fi Protected Setup in client within 2 minutes.



(3). Click PIN from Adapter Utility to complete the WPS process with the wireless router.



### 2. Start PBC:

- (1). Press the WPS button (A) from GS293d and wait for Wireless/WPS LED light (B) changed into orange.
- (2). Press the WPS button (C) from the adapter until the setup window shows up.



(3). Open a web browser to check the internet connection.



Please also refer to section 4.1.1 WPS setup for more details.

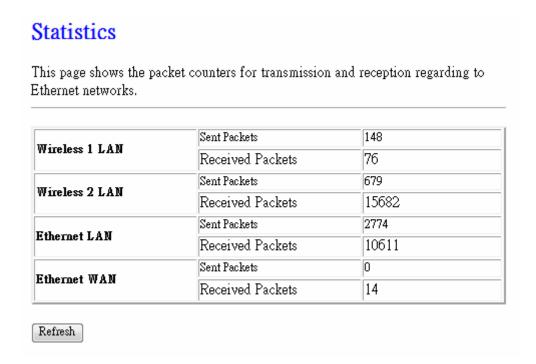
### 6.3 System Management

This section including Change Password, Firmware Upgrade, Profiles Save, Time Zone Setting, UPnP Setting, VPN Passthrough Setting, and Language Setting. It is easy and helpful for users making more detailed settings.



### 6.3.1 Statistics

It shows the packet counters for transmission and reception regarding to Ethernet networks



### 6.3.2 Change Password

Users can set or change user name and password used for accessing the web management interface in this section.



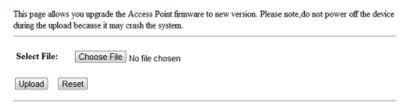
Click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data.

### 6.3.3 Firmware Upgrade

This function can upgrade the firmware of the router. There is certain risk while doing firmware upgrading. Firmware upgrade is not recommended unless the significant faulty is found and published on official website. If you feel the router has unusual behaviors and is not caused by the ISP and environment. You can check the website

(http://www.amigo.com.tw) to see if there is any later version of firmware. Download the firmware to your computer, click Browser and point to the new firmware file. Click Upload to upgrade the firmware. You can't make any move unless the machine reboot completely.

### Firmware Upgrade



Caution: To prevent that firmware upgrading is interrupted by other wireless signals and causes failure.

We recommend users to use wired connection during upgrading.

Note: The firmware upgrade will not remove your previous settings.

### $\lambda$ Reset button:

On the front of this router, there is a reset button. If you cannot login the administrator page by forgetting your password; or the router has problem you can't solve. You can push the reset button for 5 seconds with a stick. The router will reboot and all settings will be restored to factory default settings. If the problem still exists, you can visit our web site to see if there is any firmware for download to solve the problem.



### 6.3.4 Profile Save

Users can create a backup file that contains current router settings. This backup file can be used to restore router settings. This is especially useful in the event you need to reset the router to its default settings.

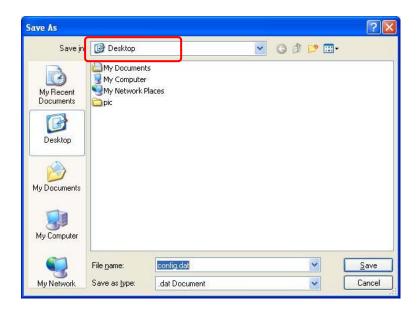
- 1. Save Configuration
- (1). Click Save

## Save/Reload Settings This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default. Save Settings to File: Load Settings from File: Reset Settings to Default: Reset

(2). Please click "Save" to save the configuration to your computer.



(3). Select the location which you want to save file, then click Save.



- 2. Load configuration file
- (1). Click Choose File

### Save/Reload Settings This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default. Save Settings to File: Load Settings from File: Choose File No file chosen Upload

(2). Select configuration file then click Open

Reset

Reset Settings to

Default:



(3). Click Upload to upload configuration file to GS293d.

### Save/Reload Settings

This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.



- (4). After 90 seconds, GS293d will reboot automatically.
- 3. Reload factory default setting
- (1). Please click Reset



(2). Please click OK to start reload factory default setting to GS293d.



(3). After 90 seconds, GS293d will reboot automatically.

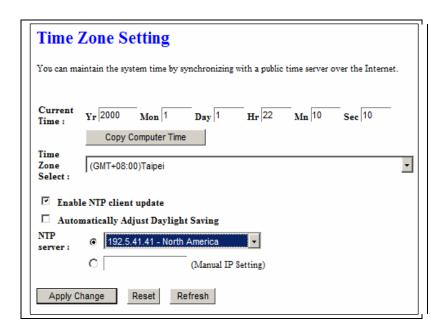
### 6.3.5 Remote Manager



Item	Description	
HTTP Connection Port	Users can access GUI by this port , default is 80	
Enable Web Server Access on WAN	Allow user access GUI from WAN side	

### 6.3.6 Time Zone Setting

Users can synchronize the local clock on the router to an available NTP server (optional). To complete this setting, enable NTP client update and select the correct Time Zone.



Item	Description	
Current Time	Users can input the time manually.	
Time Zone Select	Please select the time zone.	
Enable NTP client update	Please select to enable NTP client update or not.	
Automatically Adjust Daylight Saving	Please select to enable Automatically Adjust Daylight Saving or not.	
NTP Server	Please select the NTP server from the pull-down list, or you can enter the NTP server IP address manually.	
Apply Changes & Reset & Refresh	Please click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data. Or you may click on Refresh to update the system time on the screen.	

### 6.3.7 UPnP Setting

## UPnP and UPnP AV Setting In this page, you can turn on or turn off the UPNP and UPnP AV feature of your router. Enable/Disable UPNP: © Enabled © Disabled Enable/Disable UPNP AV: © Enabled © Disabled Apply Changes Reset

### UPNP

Universal Plug and Play (UPnP) is a standard of networking protocols promulgated by the UPnP Forum. The goals of UPnP are to allow devices to connect seamlessly and to simplify the implementation of networks in the home (data sharing, communications, and entertainment) and in corporate environments for simplified installation of computer components. GS293d supports UPnP function, and can cooperate with other UPnP devices. When you activate UPnP, please click My Network Places. Users will see an Internet Gateway Device icon. By click the icon, users can enter the GUI of the router. If you do not wish to use UPnP, you can disable it.

### UPNP AV

A UPnP AV media server is the UPnP-server that provides media library information and streams media-data (like audio/video/picture/files) to UPnP-clients on the network. It is a computer system or a similar digital appliance that stores digital media, such as photographs, movies, or music and shares these with other devices. User can plug in USB disk to product USB port and use UPnP AV client to play USB disk media-data (like audio/video/picture/files)

### 6.3.8 VPN Passthrough Setting

Virtual Private Networking (VPN) is typically used for work-related networking. For VPN tunnels, the router supports IPSec, Pass-through, PPTP Pass-through, and L2TP Pass-through.

VPN Passthrough Setting			
In this page,you can turn on or turn off the VPN Passthrough feature of your router.			
Enable/Disable IPSec Passthrough:	Enabled  Disabled		
Enable/Disable PPTP Passthrough:	Enabled  Disabled		
Enable/Disable L2TP Passthrough:	Enabled  Disabled		
Enable IPV6:	Enabled  Disabled		
Apply Change Reset			

Item	Description
IPSec Pass-through	Internet Protocol Security (IPSec) is a suite of protocols used to implement secure exchange of packets at the IP layer. To allow IPSec tunnels to pass through the router, IPSec Pass-through is enabled by default. To disable IPSec Pass-through, select Disable
PPTP Pass-through	Point-to-Point Tunneling Protocol is the method used to enable VPN sessions to a Windows NT 4.0 or 2000 server. To allow PPTP tunnels to pass through the router, PPTP Pass-through is enabled by default. To disable PPTP Pass-through, select Disable.
L2TP Pass-through	To allow the L2TP network traffic to be forwarded to its destination without the network address translation tasks.
IPV6 Pass-through	Allow IPV6 packet to be forwarded to its destination without the network address translation tasks.
Apply Changes & Reset & Refresh	Please click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data.

### 6.3.9 Language Setting

The GS293d provide 12 languages for Web GUI. You can select the language interface from the dropdown list and by following steps.

### **Language Setting**

This page allows you setup the GUI language.

Select language:



When you see the screen message change to the selected language, the setup is completed.



### 6.3.10 Routing Setup

Dynamic routing is a distance-vector routing protocol, which employs the hop count as a routing metric. RIP prevents routing loops by implementing a limit on the number of hops allowed in a path from the source to a destination. The maximum number of hops allowed for RIP is 15

Static routing is a data communication concept describing one way of configuring path selection of routers in computer networks. It is the type of routing characterized by the absence of communication between routers regarding the current topology of the network. This is achieved by manually adding routes to the router routing table.

### **Routing Setup** This page is used to setup dynamic routing protocol or edit static route entry. Enable Dynamic Route NAT: Enabled Disabled Transmit: ODisabled ORIP 1 ORIP 2 Receive: Obisabled RIP 1 RIP 2 Apply Changes Reset Enable Static Route IP Address: Subnet Mask: Gateway: Metric: Interfac: LAN Apply Changes Show Route Table Reset Static Route Table: Destination IP Address Netmask Gateway Metric Interface Select Delete Selected Delete All Reset

Item	Description	
Enable Dynamic Route	Enable or Disable dynamic route	
NAT	Enable or Disable NAT function	
Transmit	There are 3 options:  1. Disable: do not send any RIP packet out  2. Send RIP1 packet out  3. Send RIP2 packet out	
Receive	There are 3 options:  4. Disable: do not receive any RIP packet  5. Only receive RIP1 packet  6. Only receive RIP2 packet	

Item	Description	
Enable Static Route	Enable or Disable dynamic route	
IP Address	Destination IP address	
Subnet Mask	Destination IP subnet mask	
Gateway	Gateway IP address for destination	
Metric	Metric number on router's routing table	
Interface	Static route rule for LAN or WAN interface	

### **6.3.11** User Account Settings



Set user log on locally used by the FTP server shares account, password

### 6.3.12 Walk on LAN Schedule

Switch your computer ON through your LAN or the Internet. To support WOL you must have a computer with Motherboard that supports WOL, as well as a Network Controller (NIC) supporting this function. Most of the newer Motherboard (circa 2002 and On), have an On Board NIC that supports WOL. Otherwise you need to install a PCI NIC that is WOL capable.

### Walk on Lan Schedule

This page allows you setup the Walk on LAN schedule rule. Please do not forget to configure system time and select PC MAC address before enable this feature.

### Enable Walk on LAN Schedule

Enable	Day	Time	MAC Address
<b>V</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼
<b>V</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼
<b>▼</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼
<b>V</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼
<b>V</b>	Sun ▼	00 ▼ (hour) 00 ▼ (min)	00:10:23:25:AA:CF ▼
<b>▼</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼
<b>V</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼
<b>V</b>	Sun ▼	00 ▼ (hour) 00 ▼ (min)	00:10:23:25:AA:CF ▼
<b>V</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼
<b>V</b>	Sun ▼	00 • (hour) 00 • (min)	00:10:23:25:AA:CF ▼

Apply Change Reset

### 6.3.13 Samba 模式管理

### Samba management

This page allows you setup the samba security and different modes.

Samba Security:

### Share mode User mode

### Apply Change

Item	Description
Share mode	User can access USB disk without account and password
User mode	User need account to access USB disk (login account is "admin", password is not necessary).

### 6.4 Log & Status

The category provides Network Config and Event Log status for users to know the operation status.



### 6.4.1 Network Config

Users can check the Internet status under this category, including Firmware version, Wireless setting, Connecting Time, WAN, TCP/IP ...information.

System	
Uptime	0day:0h:33m:7s
Firmware Version	2007/04/25 Vext.0.7 B05
RJ45 Port Define	LAN
Wireless 1 Configuration	ши,
Mode	AP
Band	5 GHz (A+N)
SSID	11N_Broadband_Router_Od21ff
Channel Number	11
Encryption	Disabled
MAC Address	00:e0:4c:81:86:21
Associated Clients	0
Wireless 2 Configuration	•
Mode	AP
Band	2.4 GHz (N)
SSID	11N_Broadband_Router_Od21ff
Channel Number	11
Encryption	Disabled
MAC Address	00:e0:4c:81:86:21
Associated Clients	0
LAN Configuration	-
Attain IP Protocol	Fixed IP
TP Address	192 168 1 1
Subnet Mask	255,255,255,0
Default Gateway	192.168.1.1
DHCP Server	Enabled
MAC Address	00:e0:4c:81:86:21
WAN Configuration	
Attain IP Protocol	Getting IP from DHCP server
IP Address	0.0.0.0
Subnet Mask	0.0.0.0
Default Gateway	0.0.0.0
DNS 1	
DNS 2	
DNS 3	
	Connect Disconnect
USB Configuration	2ot
USB Type	Stonage
Name	PQI
Model	3100
	3100
FTP	

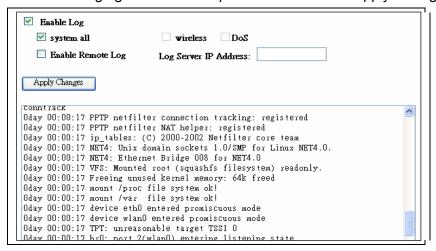
### 6.4.2 Event Log

You may enable the event log feature here.



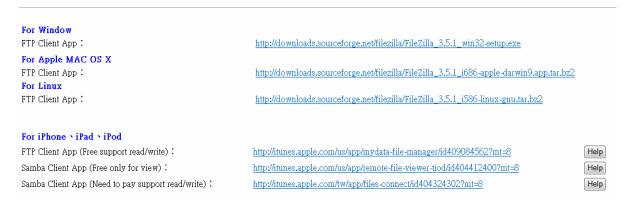
Item	Description
Enable Log	You may choose to enable Event Log or not.
System all, Wireless, & DoS	Please select the event you want to record.
Enable Remote Log	You may choose to enable the remote event log or not.
Log Server IP Address	Please input the log server IP Address.
Apply Changes & Refresh & Clear	Click on Apply Changes to save the setting data. Click on Refresh to renew the system time, or on Clear to clear all the record.

\* The following figure is an example when users click Apply Changes to record the event log.



### 6.6 App

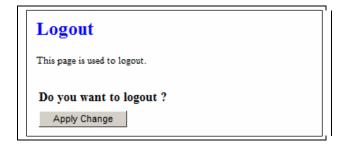
### App



Hyperlinks provide users quick and convenient for users to download with a third-party software on the machine

### 6.5 Logout

This function logs out the user.



### **Chapter 7** Samba Server

The GS293d is able to act as a Samba server to share the file on USB storage in local network.

### 7.1 How to use GS293d as a Samba server

1. Plug in the USB hard disk/Flash.



2. Star your web browser and input \\192.168.1.1.



3. Star "My Computer" and you will find a folder named "sda1".



### 7.2 Air play

Connect device to router



### Execute ipod



### 7.3 Printer Server

### To add an LPR port

- 1. Open Printers and Faxes.
- 2. Double-click Add Printer to open the Add Printer Wizard, and then click Next.
- 3. Click Local printer attached to this computer, clear the Automatically detect and install my Plug and Play printer check box, and then click Next.
- 4. Click Create a new port, and then click LPR Port.

If LPR Port is not available, click Cancel to stop the wizard. To add the LPR port, you need to install the optional networking component, Print Services for Unix. For more information, click Related Topics.

- 5. Click **Next**, and then provide the following information:
  - In Name or address of server providing LPD, type the Domain Name System (DNS) name or
     Internet Protocol (IP) address of the host for the printer you are adding. The host may be the

direct-connect TCP/IP printing device or the UNIX computer to which the printing device is connected. The DNS name can be the name specified for the host in the Hosts file.

- In Name of printer or print queue on that server, type the name of the printer as it is identified by the host, which is either the direct-connect printer itself or the UNIX computer.
- 6. Follow the instructions on the screen to finish installing the TCP/IP printer.

### **Notes**

- To open Printers and Faxes, click **Start**, and then click **Printers and Faxes**.
- The Line Printer Remote (LPR) port is best suited to servers that need to communicate with host computers (such as UNIX or VAX computers) by way of RFC 1179.
- A network-connected printer must have a card that supports LPD for LPR printing to work properly.
- You can also add ports using the Print Server Properties dialog box. For more information, click Related Topics.
- Please refer DUT/Network Config page to get name of printer

LAN Configuration	
Attain IP Protocol	Fixed IP
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
MAC Address	00:e0:4c:5a:4e:87
WAN Configuration	
Attain IP Protocol	DHCP
IP Address	192.168.10.166
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1
MAC Address	00:e0:4c:5a:4e:8f
3.5G Configuration	
Connect Speed	Auto Switch
Signal Strength	
Network Name	
Printer Configuration	
Printer Server	Enable
Printer Name	DeskJet 940C
Printer Model	Hewlett-Packard

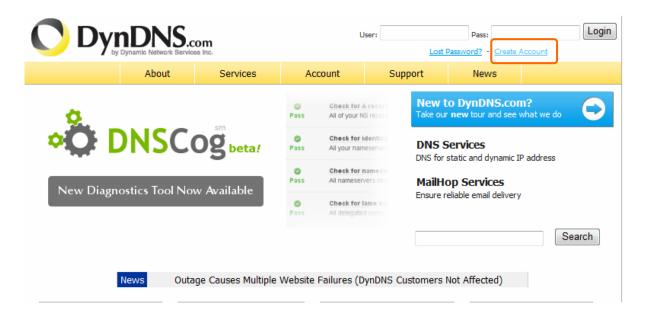
# **Chapter 8 DDNS Service Application**

DDNS is a service changes the dynamic IP to the static IP. The settings of DDNS can solve the problem of being given the different IP by router every time. After setting the Router, your host name would correspond to your dynamic IP. Moreover, via the host name application, it could be easier for you to use FTP, Webcam and Printer remotely.

Dynamic DNS allows you to make an assumed name as a dynamic IP address to a static host name. Please configure the dynamic DNS below. Please select **Dynamic DNS** under the **IP Config** folder, and follow the instructions below to enter the **Dynamic DNS** page to configure the settings you want.

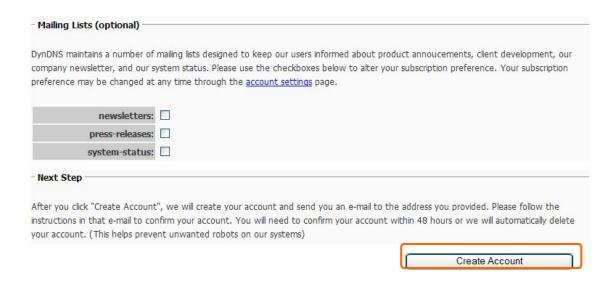
If you don't have a DDNS account, please follow the steps to complete your DDNS with Dynamic IP settings.

First access the Internet and fill <a href="http://www.dyndns.com/">http://www.dyndns.com/</a> into the address field of your web browser, then click <a href="https://www.dyndns.com/">Create Account</a>.

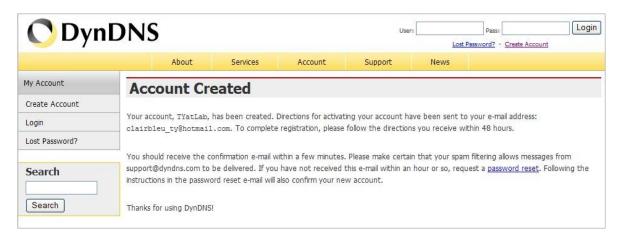


2. Fill in the form as required, and then click on **Create Account** button.

Create Your DynDNS A	ccount
Cicate roar Dynibits A	Codant
Please complete the form to create your free Dyn	DNS Account.
User Information	
Username:	
E-mail Address:	Instructions to activate your account will be sent to the e-mail address provided.
Confirm E-mail Address:	
Password:	Your password needs to be more than 5 characters and cannot be the same as your username. Do not choose a password that is a common word, or can otherwise be easily quessed.
Confirm Password:	
About You (optional)	
For your help!  How did you hear about us:	We do not sell your account information to anyone, including your e-mail address.
Details:	
Terms of Service	
	accept it prior to creating your account. Also acknowledge that you may only have one e accounts will result in the deletion of all of your accounts.
Policy Last Modified: February 6,	2006
1. ACKNOWLEDGMENT AND ACCEPTANCE O	F TERMS OF SERVICE
("AUP") and any other operatin by DynDNS. The AUP comprises t the Member and DynDNS and supe between the parties regarding herein. BY COMPLETING THE REGI	(the "Member") under the in this Acceptable Use Policy g rules and policies set forth he entire agreement between rsedes all prior agreements the subject matter contained STRATION PROCESS AND CLICKING NDICATING YOUR AGREEMENT TO BE
2. DESCRIPTION OF SERVICE	<u>~</u>
I agree to the AUP: ✓  I will only create one (1) ✓  free account:	



When you got this account created message, close it, and check your mailbox. You would get a mail from DynDNS website.



4. Click on the indicated address within your mail to confirm.

Your DynDNS Account 'TYatLab' has been created. You need to visit the confirmation address below within 48 hours to complete the account creation process:

https://www.dyndns.com/account/confirm/Z3OpStScjR\_Ypn82CNMyZQ

Our basic service offerings are free, but they are supported by our paid services. See http://www.dyndns.com/services/ for a full listing of all of our available services.

If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are automatically deleted after 48 hours, and no addresses are kept on file. We apologize for any inconvenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site requesting an account.

Sincerely, The DynDNS Team

# 5. Click on login.

# **Account Confirmed**

The account TYatLab has been confirmed. You can now login and start using your account.

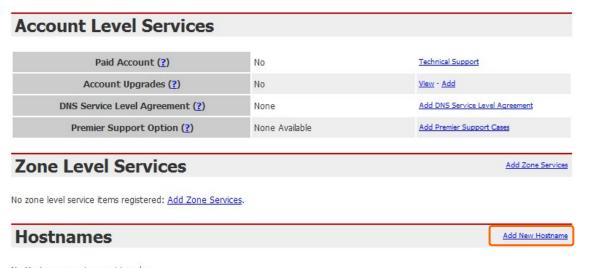
Be informed of new services, changes to services, and important system maintenance/status notifications by subscribing to our <u>mailing lists</u>.

Once there, you may subscribe to the Announce list by checking the appropriate box and clicking the "Save Settings" button.

6. Click My Services after logging in.



7. Click Add New Hostname.



No Hostname services registered.

Put in your favorite hostname and service type, and then click Create Host after finished.



9. Your hostname has been created when you see the following page.



# Chapter 9 Q & A

#### 9.1 Installation

#### 1. Q: Where is the XDSL Router installed on the network?

A: In a typical environment, the Router is installed between the XDSL line and the LAN. Plug the XDSL Router into the XDSL line on the wall and Ethernet port on the Hub (switch or computer).

# 2. Q: Why does the throughput seem slow?

A: To achieve maximum throughput, verify that your cable doesn't exceed 100 meter. If you have to do so, we advise you to purchase a bridge to place it in the middle of the route in order to keep the quality of transmitting signal. Out of this condition you would better test something else.

- Verify network traffic does not exceed 37% of bandwidth.
- Check to see that the network does not exceed 10 broadcast messages per second.
- Verify network topology and configuration.

#### 9.2 LED

#### 1. Why doesn't GS293d power up?

A: Check if the output voltage is suitable, or check if the power supply is out of order.

# 2. The Internet browser still cannot find or connect to GS293d after verifying the IP address and LAN cable, the changes cannot be made, or password is lost.

A: In case GS293d is inaccessible; you can try to restore its factory default settings. Please press the "Reset" button and keep it pressed for over 7 seconds and the light of STATUS will vanish. The LEDs will flash again when reset is successful.

# 3. Why does GS293d shut down unexpectedly?

A: Re-plug your power adapter. Then, check the STATUS indicator; if it is off, the internal flash memory is damaged. For more help, please contact with your provider.

#### 9.3 IP Address

### Q: What is the default IP address of the router for LAN port?

A: The default IP address is 192.168.1.1 with subnet mask 255.255.255.0

#### 2. Q: I don't know my WAN IP.

A: There are two ways to know.

Way 1: Check with your Internet Service Provider.

Way 2: Check the setting screen of GS293d. Click on **Status & Log** item to select **Network Configuration** on the Main Menu. WAN IP is shown on the WAN interface.

# 3. How can I check whether I have static WAN IP Address?

A: Consult your ISP to confirm the information, or check Network Configuration in GS293d 's Main Menu.

# 4. Will the Router allow me to use my own public IPs and Domain, or do I have to use the IPs provided by the Router?

A: Yes, the Router mode allows for customization of your public IPs and Domain.

# 9.4 OS Setting

#### 1. Why can't my computer work online after connecting to GS293d?

A: It's possible that your Internet protocol (TCP/IP) was set to use the following IP address. Please do as the following steps. (Windows 2000 & XP) Start > Settings > Network and Dial-up Connections > double click on Internet Protocol(TCP/IP) > select obtain IP address automatically > Click on OK button. Then, open Internet browser for testing. If you still can't go online, please test something else below.

- Verify network configuration by ensuring that there are no duplicate IP addresses.
- Power down the device in question and ping the assigned IP address of the device. Ensure no other device responds to that address.
- Check that the cables and connectors or use another LAN cable.

# 2. Q: Why can't I connect to the router's configuration utility?

A: Possible Solution 1: Make sure that your Ethernet connect properly and securely. Make sure that you've plugged in the power cord.

Possible Solution 2: Make sure that your PC is using an IP address within the range of 192.168.1.2 to 192.168.1.254. Make sure that the address of the subnet mask is 255.255.255.0. If necessary, the Default Gateway data should be at 192.168.1.1. To verify these settings, perform the following steps:

#### Windows 2000, or XP Users:

- 1. Click on Windows **Start** > click on **Run** > input **cmd** > click on **OK** button.
- 2. At the DOS prompt, type ipconfig/all.
- Check the IP Address, Subnet Mask, Default Gateway data. Is this data correct? If the data isn't correct. Please input ipconfig/release > press Enter > input ipconfig/renew > press Enter.

Possible Solution 3: Verify the connection setting of your Web browser and verify that the HTTP Proxy feature of your Web browser is disabled. Make these verifications so that your Web browser can read configuration pages inside your router. Launch your Web browser.

#### **Internet Explorer Users:**

- 1. Click on Tools > Internet Options > Connections tab.
- 2. Select **never dial a connection**, click on **Apply** button, and then click on **OK** button.
- 3. Click on **Tools** and then click on **Internet Options**.
- 4. Click on **Connections** and then click on **LAN Settings**.
- 5. Make sure none of the check boxes are selected and click on **OK** button.
- 6. Click on OK button.

# **Netscape Navigator Users:**

- 1. Click on **Edit** > **Preferences** > double-click **Advanced** in the Category window.
- 2. Click on **Proxies** > select **Direct connection to the Internet** > click on **OK** button.
- 3. Click on **Edit again** and then click on **Preferences**.
- 4. Under category, double-click on **Advanced** and then click on **Proxies**.
- 5. Select **Direct connection to the Internet** and click on **OK** button.
- 6. Click on **OK** button.
- 3. Q: Web page hangs, corrupt downloads, or nothing but junk characters is being displayed on the screen. What do I need to do?

A: Force your NIC to 10Mbps or half duplex mode, and turn off the "Auto-negotiate" feature of your NIC as a temporary measure. (Please look at the Network Control Panel, in your Ethernet Adapter's Advanced Properties tab.)

#### 4. Q: Why can't I connect to the Web Configuration?

A: you can remove the proxy server settings in your web browser.

# 9.5 GS293d Setup

# Q: Why does GS293d's setup page shut down unexpectedly?

A: If one of the pages appears incompletely in GS293d 's setup pages, please click on Logout item on the Main Menu before shutting it down. Don't keep it working. Then, close Internet browser and open it again for going back to the previous page.

# 2. Q: I don't know how to configure DHCP.

A: DHCP is commonly used in the large local network. It allows you to manage and distribute IP addresses from 2 to 254 throughout your local network via GS293d. Without DHCP, you would have to configure each computer separately. It's very troublesome. Please Open Internet browser > Input 192.168.1.1 in the website blank field > Select DHCP Server under the IP Config Menu. For more information, please refer to 3.3.2 (Router Mode) or 4.3.1 (AP Mode).

# 3. Q: How do I upgrade the firmware of GS293d?

A: Periodically, a new Flash Code is available for GS293d on your product supplier's website. Ideally, you should update GS293d 's Flash Code using **Firmware Upgrade** on the **System Management** menu of GS293d Settings.

# 4. Q: Why is that I can ping to outside hosts, but cannot access Internet websites?

A: Check the DNS server settings on your PC. You should get the DNS servers settings from your ISP. If your PC is running a DHCP client, remove any DNS IP address setting. As the router assign the DNS settings to the DHCP-client-enabled PC.

#### 5. Q: GS293d couldn't save the setting after click on Apply button?

A: GS293d will start to run after the setting finished applying, but the setting isn't written into memory. Here we suggest if you want to make sure the setting would be written into memory, please reboot the device via **Rebo**ot under **System Management** directory.

### 9.6 Wireless LAN

# 1. Q: Why couldn't my wireless notebook work on-line after checking?

A: Generally, Wireless networks can sometimes be very complicated to set up, particularly if you're dealing with encryption and products from different vendors. Any number of variables can keep your workstations from talking to each other. Let's go over some of more common ones.

For starters, verify that your router and your workstation are using the same SSID descriptions. SSID acts as a password when a mobile device tries to connect to the wireless network. The SSID also differentiates one WLAN from another, so all access points and all devices attempting to connect to a specific WLAN must use the same SSID. A workstation will not be permitted to connect to the network unless it can provide this unique identifier. This is similar to the function of your network's Workgroup or Domain name.

When you're experiencing conductivity problems, it is always best to keep things simple. So next you are going to do is that, please disable any WEP encryption you might have configured.

Successful implementation of encryption also includes the use of a shared key. A HEX key is the most common, but other formats are also used. This key identifies the workstation to the router as a trusted member of this network. Different manufacturers can implement this key technology in ways that might prevent them from working correctly with another vendor's products. So pay attention to detail is going to be the key to a successful installation.

Next make sure the router and the NIC are configured to use the same communications channel. There are normally 11 of them, and the default channel can also vary from vendor to vendor. You might also want to confirm that the router has DHCP services enabled and an address pool configured. If not, the NIC won't be able to pick up an IP address. I have run across a few access points that offer DHCP services but do not assign all of the needed IP information to the NIC. As a result, I was able to connect to the network, but could not browse the web. The point is, don't assume anything. Verify for yourself that all of the required settings are being received by the workstation.

Finally, you might want to keep the system you're trying to configure in the same room as the router, at least during the initial configuration, in order to minimize potential interference from concrete walls or steel beams.

### 2. Q: My PC can't locate the Wireless Access Point.

# A: Check the following:

- Your PC is set to Infrastructure Mode. (Access Points are always in Infrastructure Mode.)
- The SSID on your PC and the Wireless Access Point are the same. Remember that the SSID is case-sensitive. So, for example "Workgroup" does NOT match "workgroup".
- Both your PC and the Wireless Access Point must have the same setting for WEP. The default setting for the Wireless Router is disabled, so your wireless station should also have WEP disabled.
- If WEP is enabled on the Wireless Router, your PC must have WEP enabled, and the key must match.
- If the Wireless Router's Wireless screen is set to Allow LAN access to selected Wireless Stations only, then each of your Wireless stations must have been selected, or access will be blocked.
- To see if radio interference is causing a problem, see if connection is possible when close to the Wireless Access Point. Remember that the connection range can be as little as 100 feet in poor environments.

# 3. Q: Wireless connection speed is very slow.

- A: The wireless system will connect at highest possible speed, depending on the distance and the environment. To obtain the highest possible connection speed, you can experiment with following:
  - Access Point location: Try adjusting the location and orientation of the Access Point.
  - Wireless Channel: If interference is the problem, changing to another channel may show a marked improvement.
  - Radio Interference: Other devices may be causing interference. You can
    experiment by switching other devices off, and see if this helps. Any "noisy"
    devices should be shielded or relocated.
  - RF Shielding: Your environment may tend to block transmission between the wireless stations. This will mean high access speed is only possible when close to the Access Point.

# 4. Q: Some applications do not run properly when using the Wireless Router.

- A: The Wireless Router processes the data passing through it, so it is not transparent. Use the Special Application feature to allow the use of Internet applications which do not function correctly. If this does solve the problem, you can use the DMZ function. This should work with almost every application, but:
  - It is a security risk, since the firewall is disabled.
  - Only one (1) PC can use this feature.

## 5. Q: I can't connect to the Wireless Router to configure it.

A: Check the following:

- The Wireless Router is properly installed, LAN connections are OK, and it is powered ON.
- Make sure that your PC and the Wireless Router are on the same network segment.
- If your PC is set to "Obtain an IP Address automatically" (DHCP client), restart it.
- If your PC uses a Fixed (Static) IP address, make sure that it is using an IP Address within the range 192.168.1.129 to 192.168.1.253 and thus compatible with the Wireless Router's default IP Address of 192.168.1.254. Also, the Network Mask should be set to 255.255.255.0 to match the Wireless Router. In Windows, you can check these settings by using Control Panel ~ Network to check the Properties for the TCP/IP protocol.

# 6. Q: The WinXP wireless interface couldn't communicate the WEP with GS293d's wireless interface.

A: The default WEP of WinXP is **Authentication Open System - WEP**, but the WEP of GS293d is only for **Shared Key - WEP**, it caused both sides couldn't communicate. Please select the WEP of WinXP from Authentication Open System to **Pre-shared Key - WEP**, and then the WEP wireless interface between WinXP and GS293d would be communicated.

# 9.7 Support

# 1. Q: What is the maximum number of IP addresses that the XDSL Router will support?

A: The Router will support to 253 IP addresses with NAT mode.

#### 5. Q: Is the Router cross-platform compatible?

A: Any platform that supports Ethernet and TCP/IP is compatible with the Router.

# 9.8 Others

# 1. Q: Why does the router dial out for PPPoE mode very often?

A: Normally some of game, music or anti-virus program will send out packets that trigger the router to dial out, you can close these programs. Or you can set the idle time to 0, then control to dial out manually.

# 2. Q: What can I do if there is already a DHCP server in LAN?

A: If there are two DHCP servers existing on the same network, it may cause conflict and generate trouble. In this situation, we suggest to disable DHCP server in router and configure your PC manually.

# 9.9 USB Device

# 1. Q: How many USB devices can be connected to the Product?

A: GS293d has 2 USB ports.

# **Chapter 10 Appendices**

# 10.1 Operating Systems

- 1. Microsoft: Windows 2000, XP, Vista, Windows 7.
- 2. Apple: Mac OS X 10.4.7, Leopard and the following related versions.
- 3. Linux: Redhat 9, Fedora 6 & 7, Ubuntu 7.04 and the following related versions.

# 10.2 Browsers

- 1. Internet Explorer ver. 6 and 7 and the following related versions.
- 2. FireFox ver. 2.0.0.11 and the following related versions.3.
- 3. Safari ver. 3.04 and the following related versions.

# 10.3 Communications Regulation Information

Should any consumers need to learn more information, services and supports, please contact the supplier of your product directly.