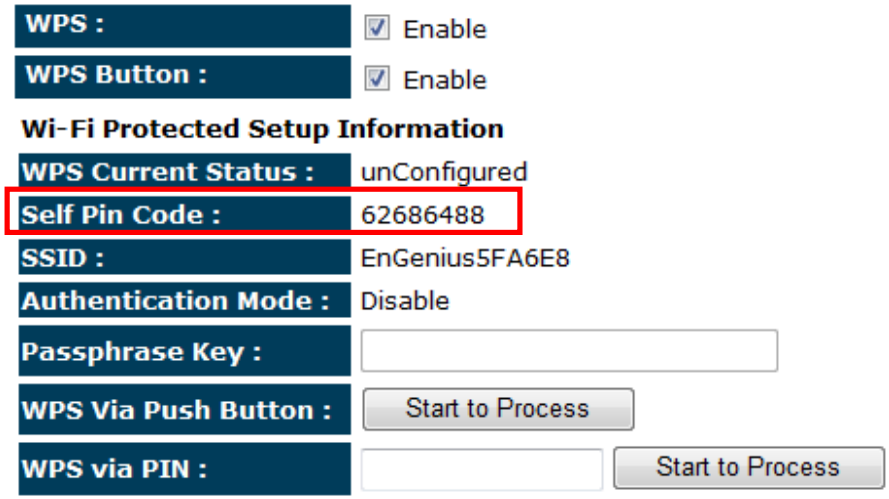
2. Pin Code Method

Note the Pin code of your TRAVEL ROUTER device.

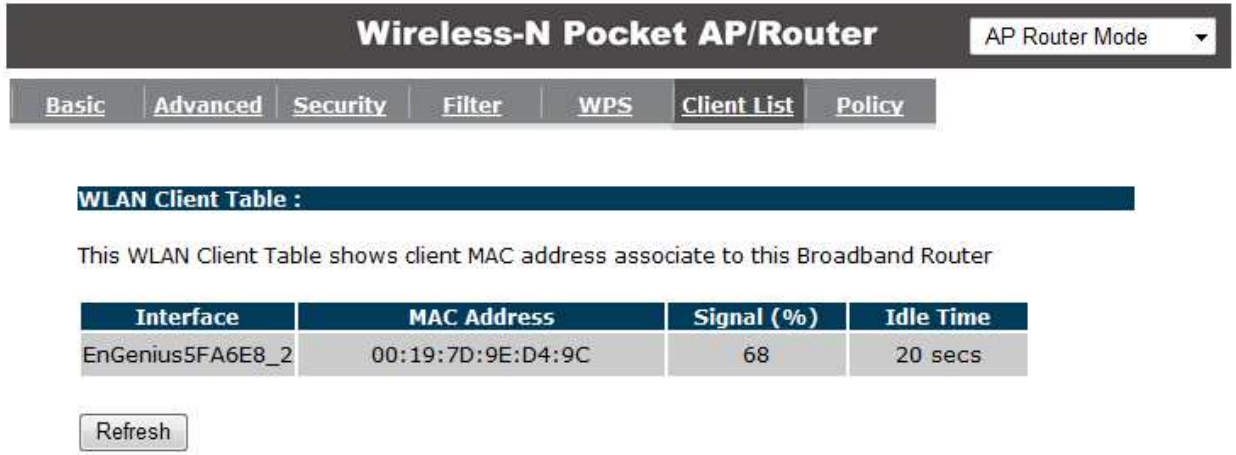


Please use this Pin code to initialize the WPS process from the wireless client configuration utility.

This process will be different for each brand or model. Please consult the user manual of the wireless client for more information.

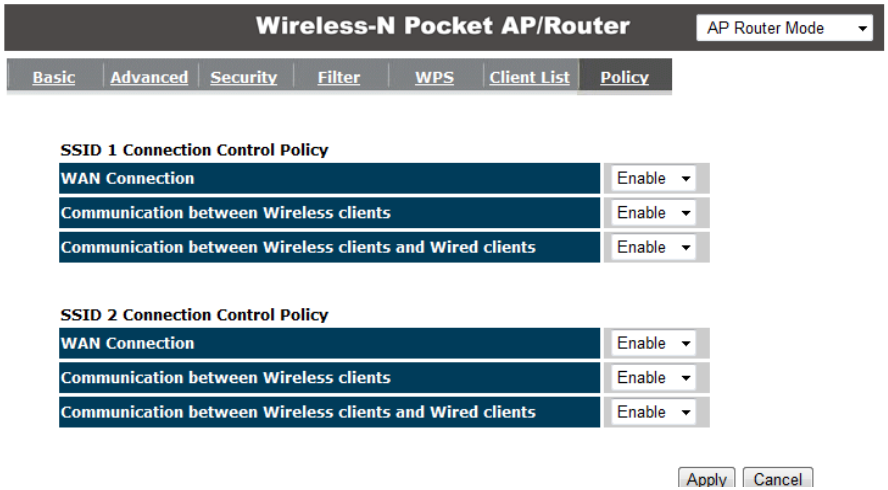
Client List

This page shows the wireless clients that are connected to the TRAVEL ROUTER device.



Policy

This page allows you to configure the access policies for each SSID (wireless network).



Policy	
WAN Connection:	Allow wireless clients on this SSID to access the WAN port which typically is an Internet connection.
Communication between Wireless clients:	Whether each wireless client can communicate with each other in this SSID. When Disabled, the wireless clients will be isolated from each other.
Communication between Wireless clients and Wired clients.	Whether wireless clients on this SSID can communicate with computers attached to the wired LAN port.

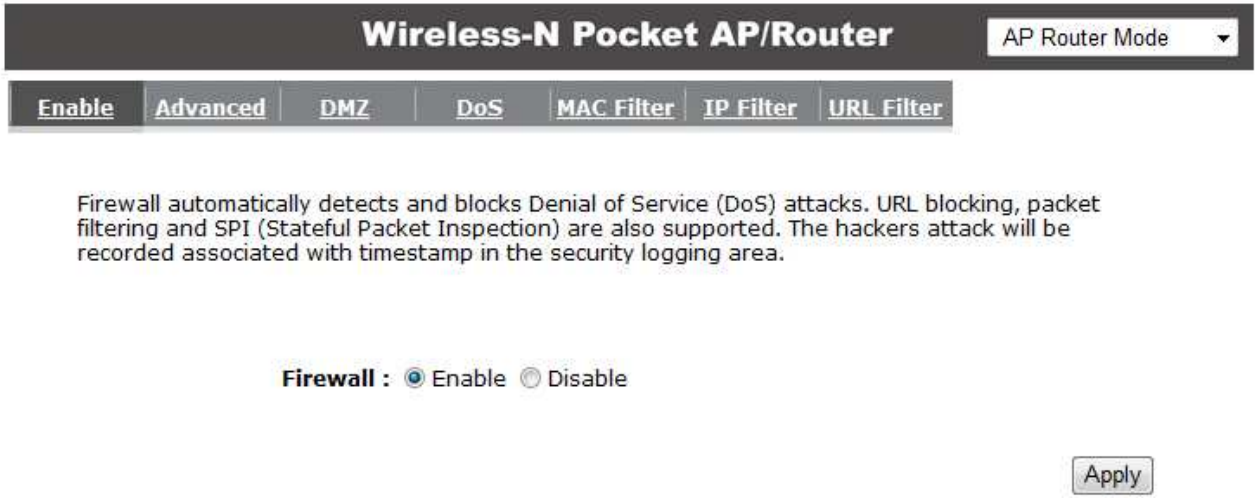
8.2.4 Firewall

The Internet section allows you to set the access control and Firewall settings.

Enable

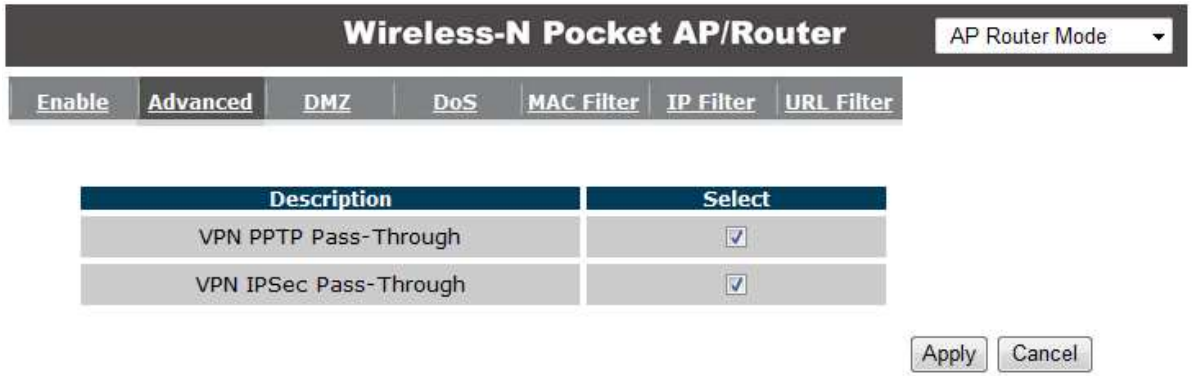
This page allows you to Enable / Disable the Firewall features.

When Enabled, Denial of Service (DoS) and SPI (Stateful Packet Inspection) features are also be enabled.



Advanced

You can choose whether to allow VPN (Virtual Private Network) packets to pass through the Firewall.

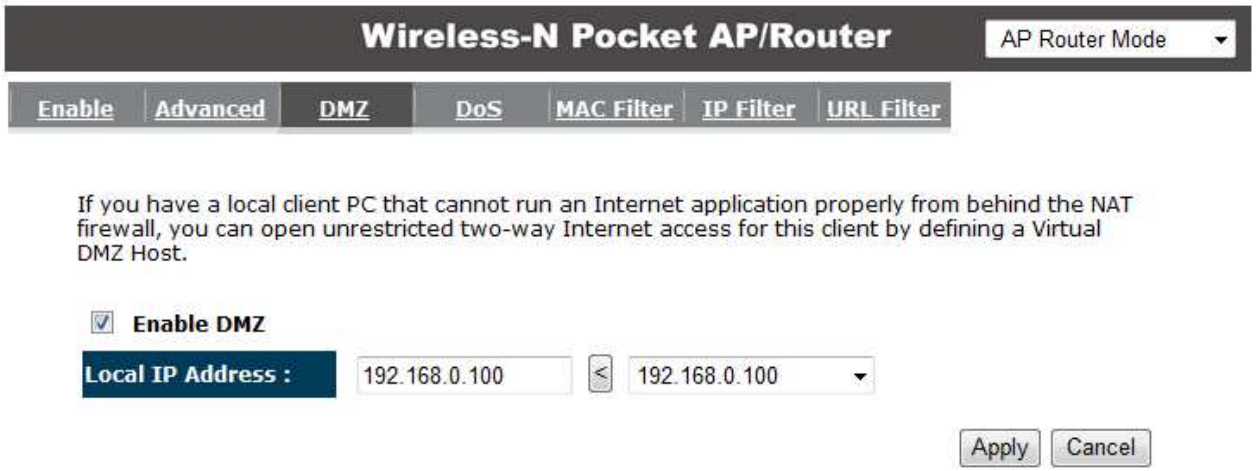


DMZ

This feature, if enabled, allows the DMZ computer on your LAN to be exposed to all users on the Internet.

- This allows almost any application to be used on the “DMZ PC”
- The “DMZ PC” will receive all Unknown connections and data.
- If the DMZ feature is enabled, please enter the IP address of the PC to be used as the “DMZ PC”

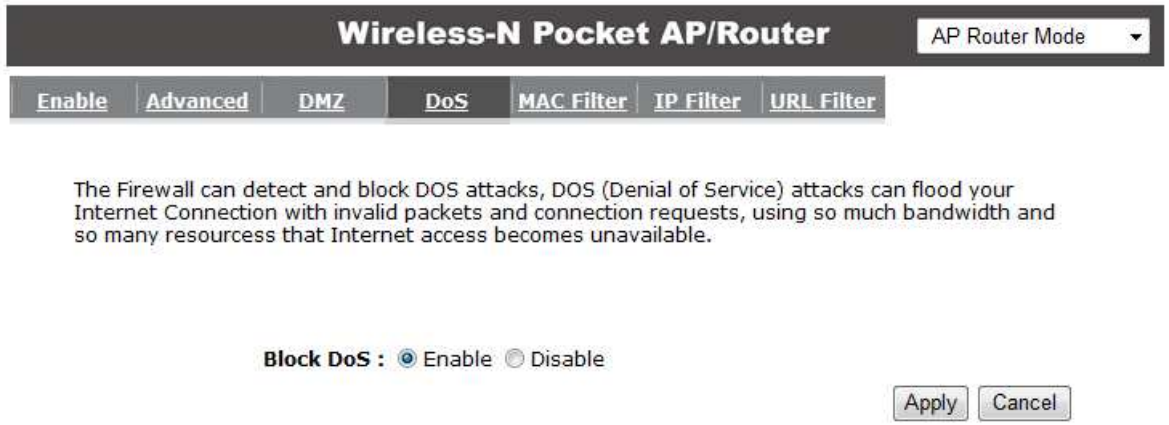
Note: The “DMZ PC” is effectively outside the Firewall, making it more vulnerable to attacks. For this reason, you should only enable the DMZ feature when required.



Denial of Service (DoS)

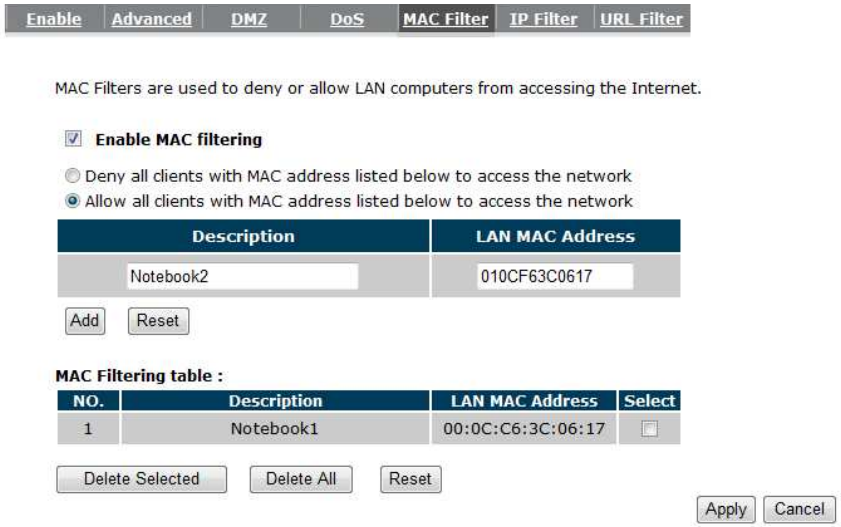
Denial of Service (Denial of Service) is a type of Internet attack that sends a high amount of data to you with the intent to overload your Internet connection.

Enable the DoS firewall feature to automatically detect and block these DoS attacks.



MAC Filter

You can choose whether to Deny or only Allow those computers listed in the MAC Filtering table to access the Internet.

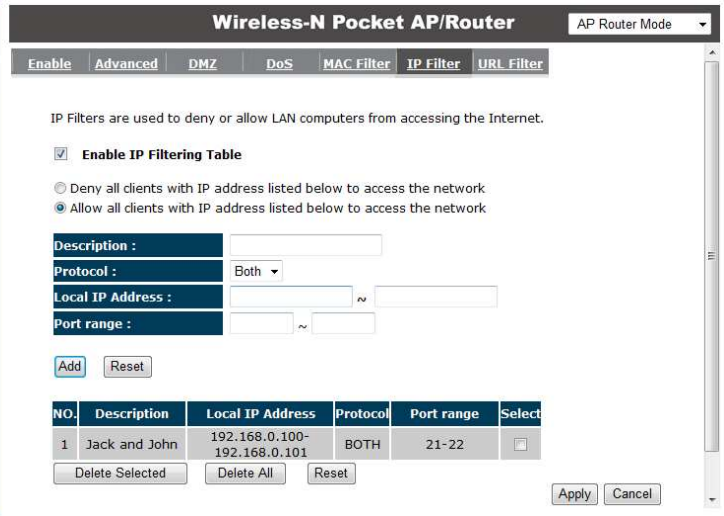


MAC Filter	
Enable MAC filtering:	Tick this box to Enable the MAC filtering feature.
Deny all clients with MAC addresses listed below to access the network:	When selected, the computers listed in the MAC Filtering table will be **Denied** access to the Internet.
Allow all clients with MAC addresses listed below to access the network:	When selected, only the computers listed in the MAC Filtering table will be **Allowed** access to the Internet.

IP Filter

You can choose whether to Deny or only Allow, computer with those IP Addresses from accessing certain Ports.

This can be used to control which Internet applications the computers can access.
You may need to have certain knowledge of what Internet ports the applications use.

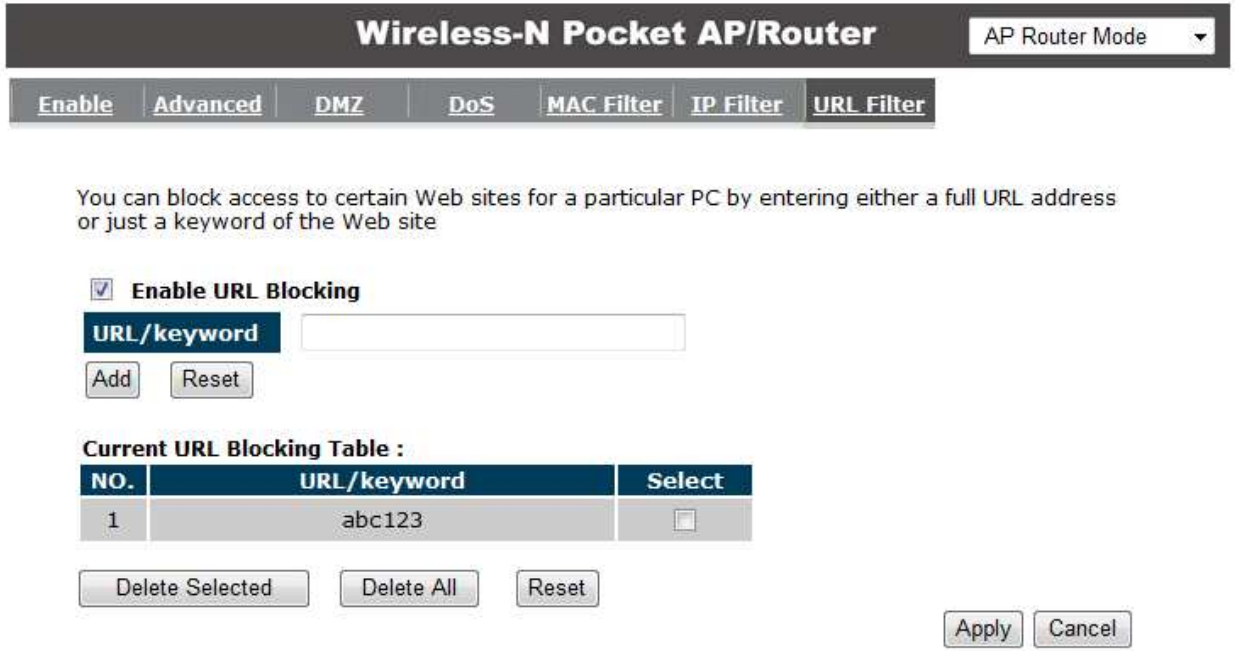


IP Filter	
Enable IP filtering:	Tick this box to Enable the IP filtering feature.
Deny all clients with IP addresses listed below to access the network:	When selected, the computers with IP addresses specified will be **Denied** access to the indicated Internet ports.
Allow all clients with IP addresses listed below to access the network:	When selected, the computers with IP addresses specified will be **Allowed** access only to the indicated Internet ports.

URL Filter

You can deny access to certain websites by blocking keywords in the URL web address.

For example, “abc123” has been added to the URL Blocking Table. Any web address that includes “abc123” will be blocked.



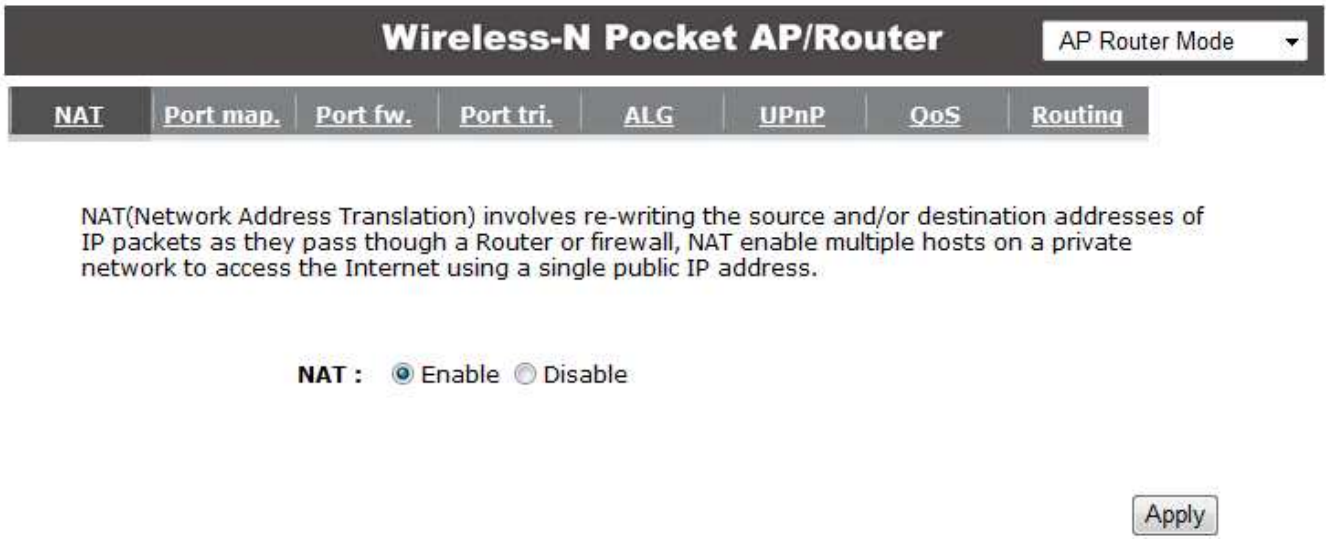
8.2.5 Advanced

The Internet section allows you to configure the **Advanced** settings of the router.

Network Address Translation (NAT)

This page allows you to Enable / Disable the Network Address Translation (NAT) feature. The NAT is required to share one Internet account with multiple LAN users.

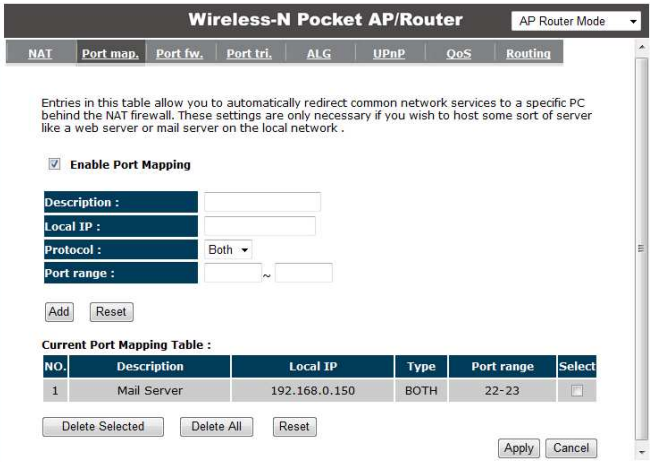
It also is required for certain Firewall features to work properly.



Port Mapping

Port Mapping allows you to redirect a particular range of ports to a computer on your LAN network. This helps you host servers behind the NAT and Firewall.

In the example below, there is a Mail Server that requires ports 22 to 23.
When there is a connection from the Internet on those ports, it will be redirected to the Mail Server at IP address 192.168.0.150.



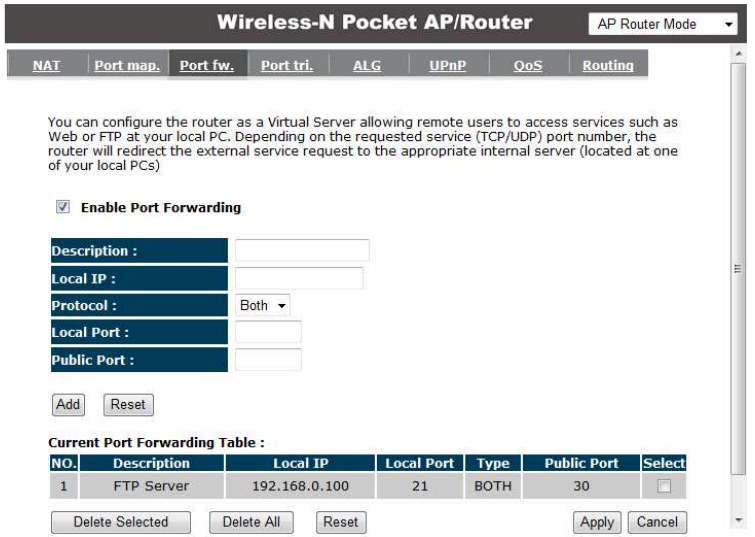
Port Mapping	
Enable Port Mapping	Tick this box to Enable the Port Mapping feature.
Description:	Enter a name or description to help you identify this entry.
Local IP:	The local IP address of the computer the server is hosted on.
Protocol:	Select to apply the feature to either TCP, UDP or Both types of packet transmissions.
Port range:	The range of ports that this feature will be applied to.

Port Forwarding

Port Forwarding allows you to redirect a particular public port to a computer on your LAN network. This helps you host servers behind the NAT and Firewall.

In the example below, there is a FTP Server running on port 21 on the LAN.
For security reasons, the Administrator would like to provide this server to Internet connection on port 30.

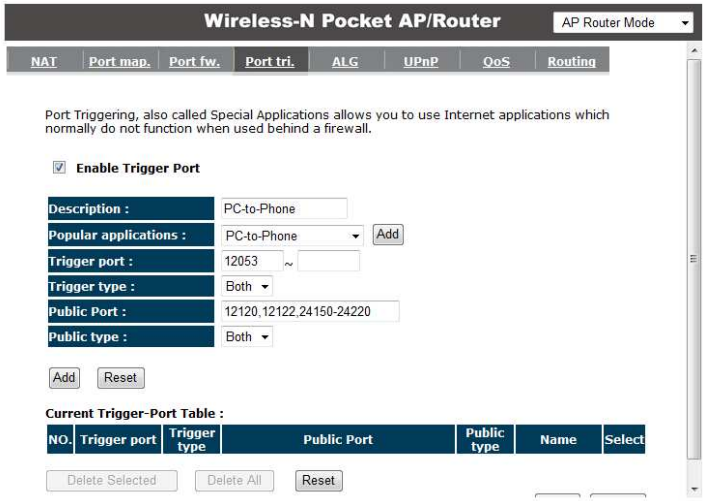
Therefore then there is a connection from the Internet on port 30, it will be forwarded to the computer with the IP address 192.168.0.100 and changed to port 21.



Port Forwarding	
Enable Port Forwarding	Tick this box to Enable the Port Forwarding feature.
Description:	Enter a name or description to help you identify this entry.
Local IP:	The local IP address of the computer the server is hosted on.
Protocol:	Select to apply the feature to either TCP, UDP or Both types of packet transmissions.
Local Port:	The port that the server is running on the local computer.
Public Port:	When a connection from the Internet is on this port, then it will be forwarded to the indicated local IP address.

Port Trigger

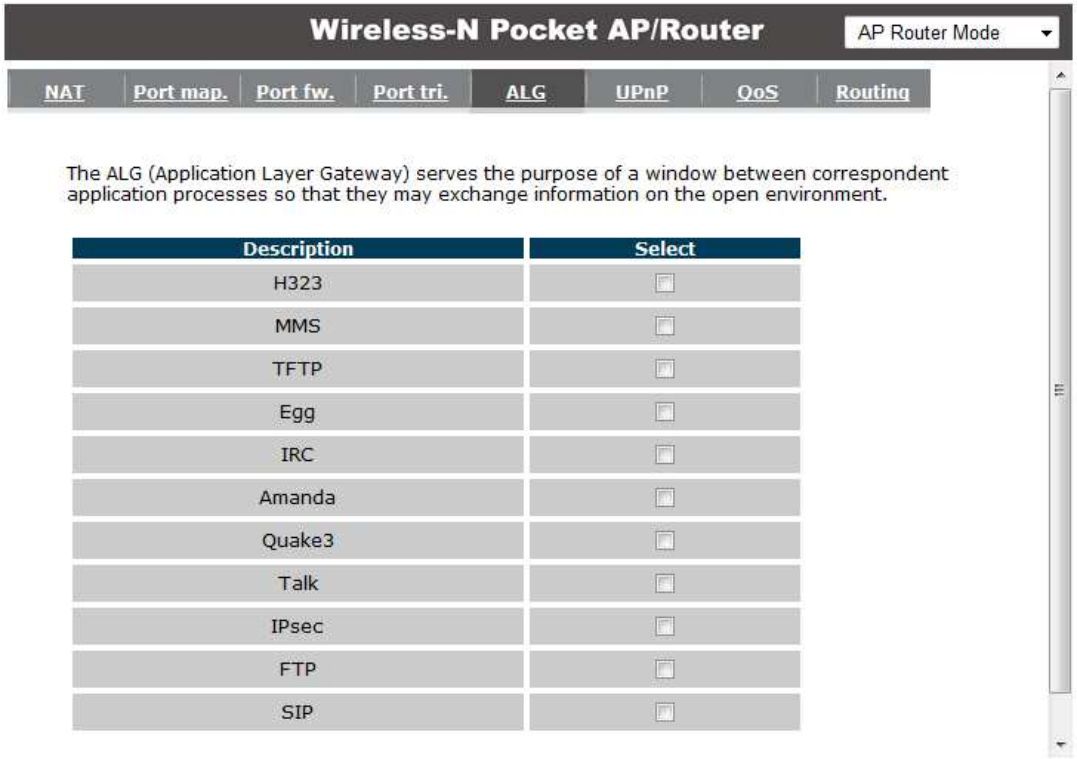
If you use Internet applications which use non-standard connections or port numbers, you may find that they do not function correctly because they are blocked by the Wireless Router's firewall. Port Trigger will be required for these applications to work.



Port Trigger	
Enable Port Forwarding	Tick this box to Enable the Port Trigger feature.
Popular applications:	This is a list of some common applications with preset settings. Select the application and click **Add** to automatically enter the settings.
Trigger port:	This is the outgoing (outbound) port numbers for this application.
Trigger type	Select whether the application uses TCP, UDP or Both types of protocols for outbound transmissions.
Public Port	These are the inbound (incoming) ports for this application.
Public type:	Select whether the application uses TCP, UDP or Both types of protocols for inbound transmissions.

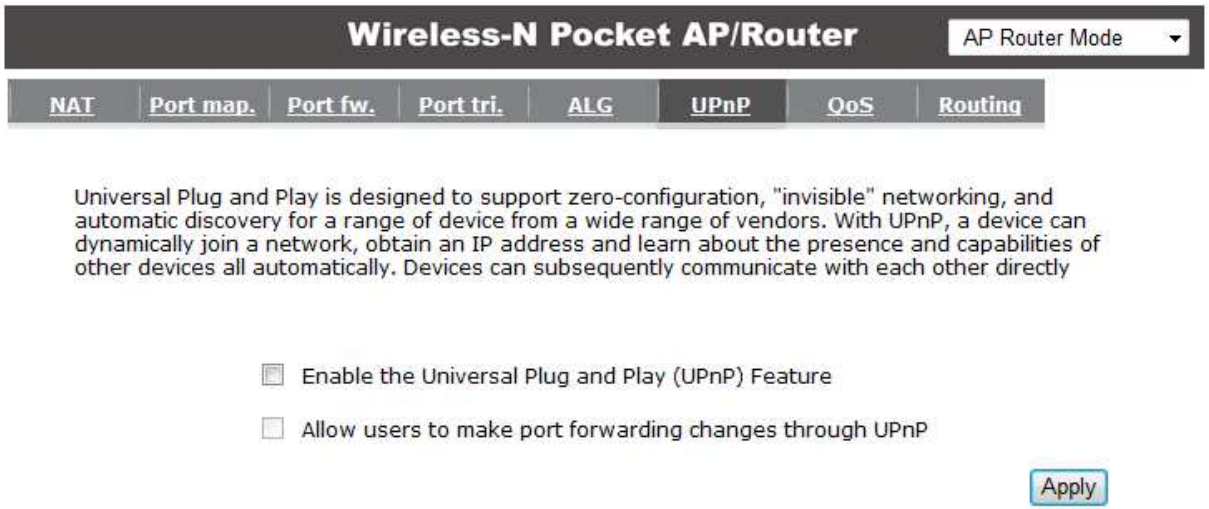
Application Layer Gateway (ALG)

Certain applications may require the use of ALG feature to function correctly. If you use any of the applications listed, please tick and select it to enable this feature.



Universal Plug and Play (UPnP)

The UPnP function allows automatic discovery and configuration of UPnP enabled devices on your network. It also provides automatic port forwarding for supported applications to seamlessly bypass the Firewall.



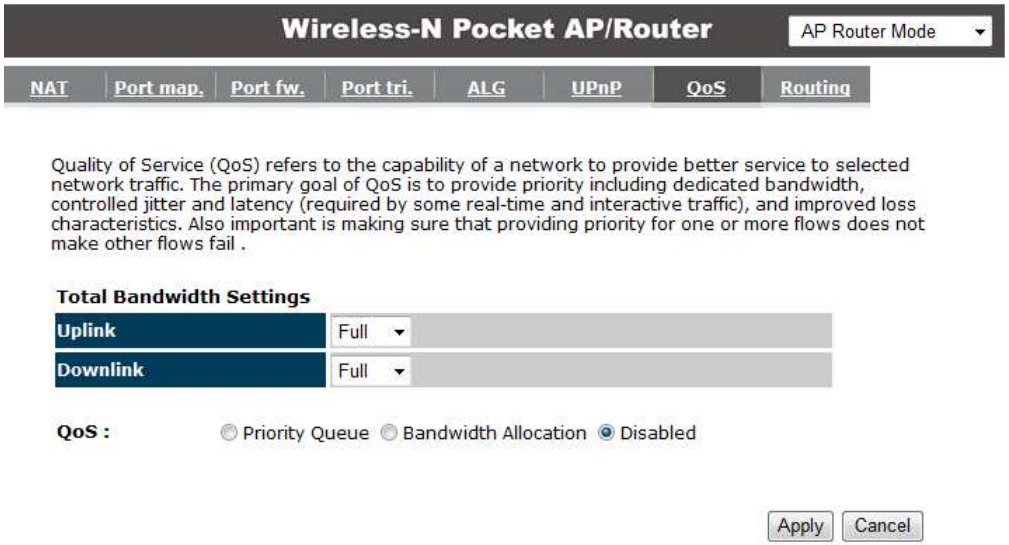
Universal Plug and Play (UPnP)	
Enable the UPnP Feature:	Tick this box to Enable the UPnP feature to allow supported devices to be visible on the network.
Allow users to make port forwarding changes through UPnP:	Tick this box to allow applications to automatically set their port forwarding rules to bypass the firewall without any user set up.

Quality of Service (QoS)

QoS allows you to control the priority that the data is transmitted over the Internet, or to reserve a specific amount of Internet bandwidth. This is to ensure that applications get enough Internet bandwidth for a pleasant user experience.

If not, then the performance and user experience of time sensitive transmissions such as voice and video could be very poor.

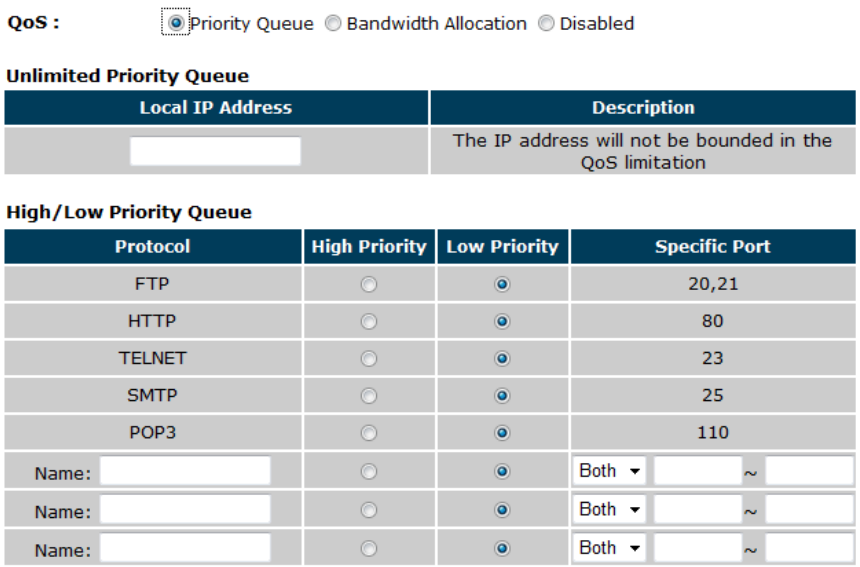
In order for this feature to function properly, the user should first set the Uplink and Downlink bandwidth provided by your Internet Service Provider.



Total Bandwidth Settings	
Uplink:	Set the Uplink bandwidth provided by your Internet Service Provider.
Downlink:	Set the Downlink bandwidth provided by your Internet Service Provider.
Priority Queue	Sets the QoS method to Priority Queue.
Bandwidth Allocation:	Sets the QoS method to Bandwidth Allocation.
Disabled	Disables the QoS feature.

Priority Queue Method

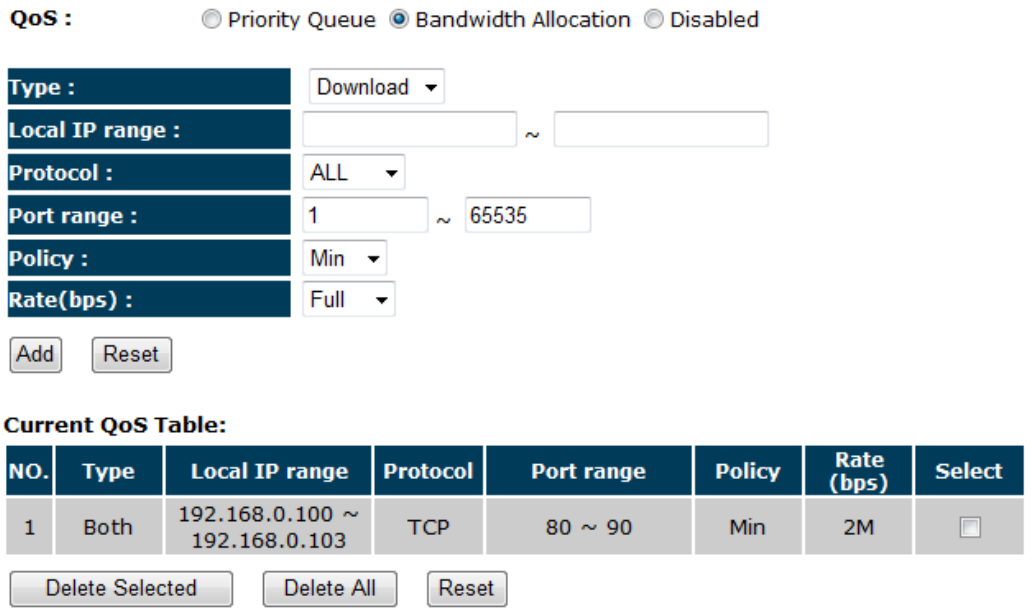
Bandwidth priority is set to either High or Low. The transmissions in the High queue will be processed first.



Unlimited Priority Queue	
Local IP Address:	The computer with this IP Address will not be bound by the QoS rules.
High / Low Priority Queue	
Protocol:	The type of network protocol.
High / Low Priority	Sets the protocol to High or Low priority.
Specific Port	Each protocol uses a specific port range. Please specify the ports used by this protocol.

Bandwidth Allocation Method

You can set the **maximum** amount of bandwidth a certain protocol will use at one time. Or you can set a **minimum** amount of bandwidth that will be guaranteed to a certain protocol.

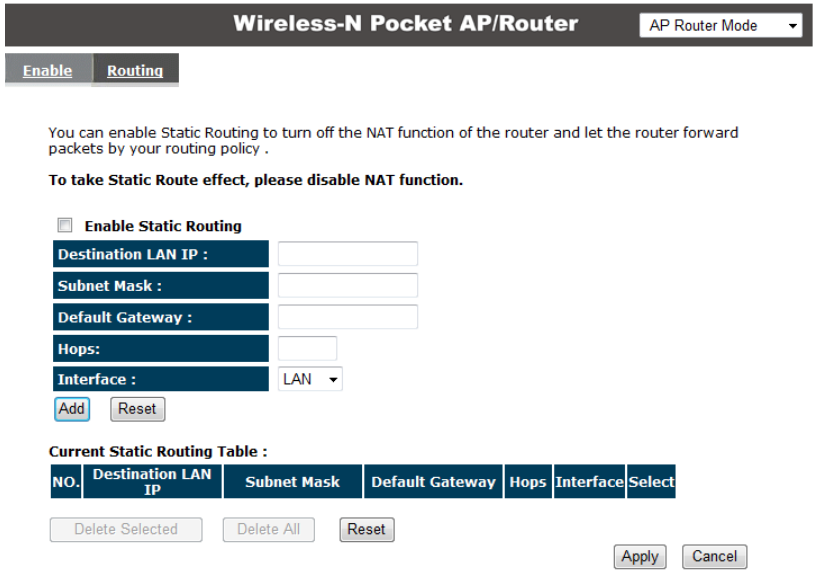


Bandwidth Allocation	
Type:	Set whether the QoS rules apply to transmission that are Download, Upload or Both directions.
Local IP range:	Enter the IP address range of the computers that you would like the QoS rules to apply to.
Protocol:	Select from this list of protocols to automatic set the related port numbers.
Port range:	Each protocol uses a specific port range. Please specify the ports used by this protocol..
Policy:	Choose whether this rule is to set a limit on the **Maximum** amount of bandwidth allocated to this protocol, or to set the guaranteed M**inimum** amount of bandwidth for this protocol.

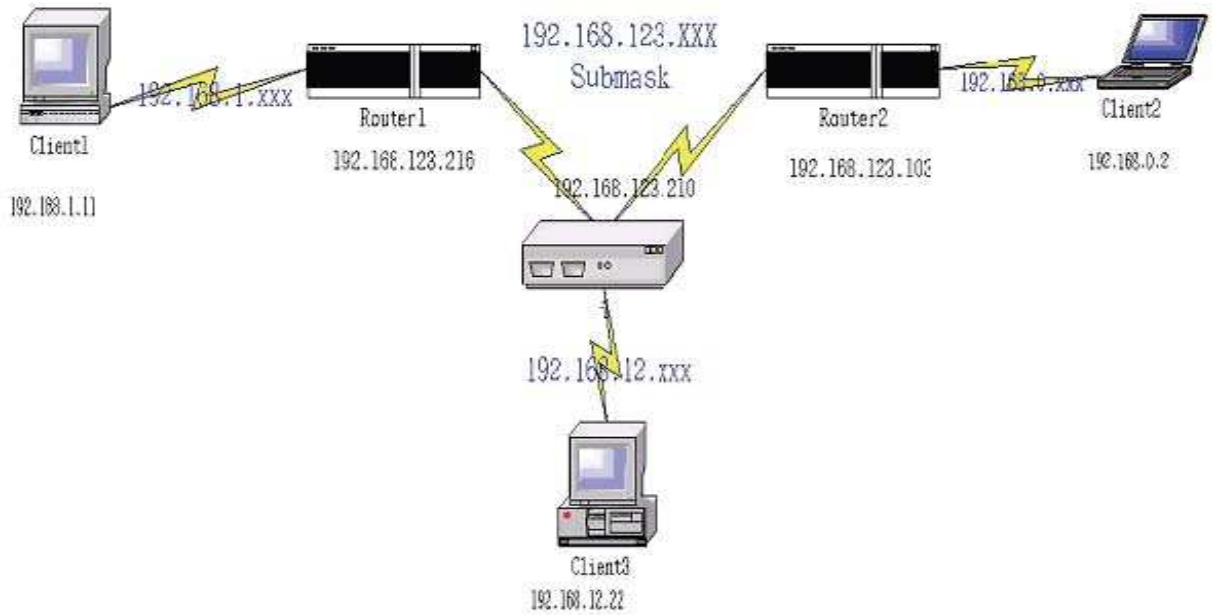
Routing

If your TRAVEL ROUTER device is connected a network with different subnets, then this feature will allow the different subnets to communicate with each other.

Note: NAT function needs to be disabled for the Routing feature to be enabled.



Static Routing	
Enable Static Routing:	Tick this box to Enable the Static Router feature.
Destination LAN IP:	Enter the IP address of the destination LAN.
Subnet Mask:	Enter the Subnet Mask of the destination LAN IP address
Default Gateway:	Enter the IP address of the Default Gateway for this destination IP and Subnet.
Hops:	Specify the maximum number of Hops in the static routing rule.
Interface:	Select whether the routing applies to LAN or WAN interfaces.



Destination	Subnet Mask	Gateway	Hop	Interface
192.168.1.0	255.255.255.0	192.168.123.216	1	LAN
192.168.0.0	255.255.255.0	192.168.123.103	1	LAN

So if, for example, Client3 wants to send an IP data packet to 192.168.0.2 (Client 2), it would use the above table to determine that it had to go via 192.168.123.103 (Router 2)

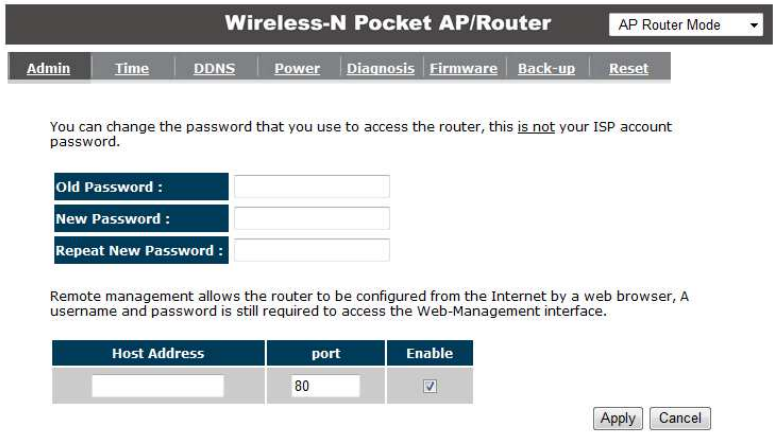
And if it sends Packets to 192.168.1.11 (Client 1) will go via 192.168.123.216 (Router 1).

8.2.6 Tools

This section allows you to configure some device system settings.

Admin

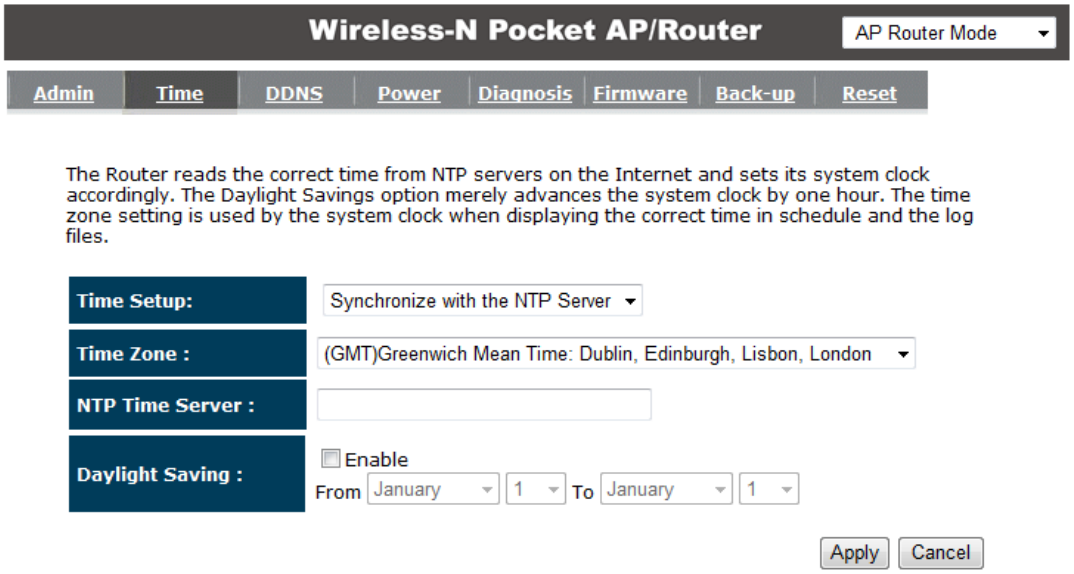
This page allows you to change the system password and to configure remote management.



Change Password	
Old Password:	Enter the current password.
New Password:	Enter your new password.
Repeat New Password:	Enter your new password again for verification.
Remote Management	
Host Address:	You can only perform remote management from the specified IP address. Leave blank to allow any host to perform remote management.
Port:	Enter the port number you want to accept remote management connections.
Enable:	Tick to Enable the remote management feature.

Time

This page allows you to set the system time.

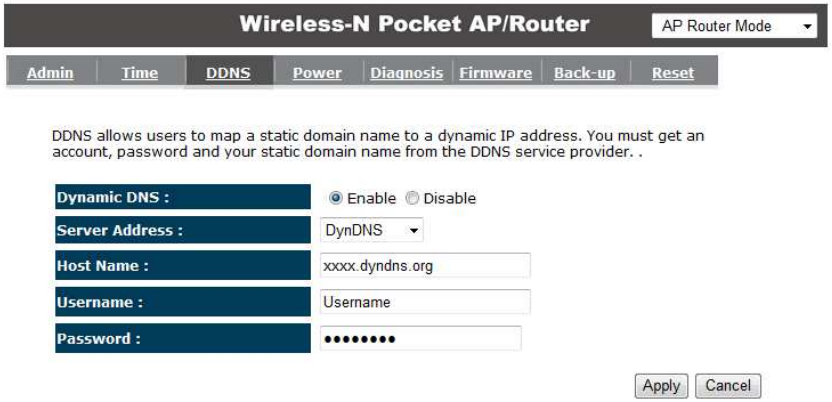


Time	
Time Setup:	Select the method you want to set the time.
Time Zone:	Select the time zone for your current location.
NTP Time Server:	Enter the address of the Network Time Protocol (NTP) Server to automatically synchronize with a server on the Internet.
Daylight Savings:	Check whether daylight savings applies to your area.

Dynamic DNS (DDNS)

This free service is very useful when combined with the *Virtual Server* feature. It allows Internet users to connect to your Virtual Servers using a URL, rather than an IP Address.

This also solves the problem of having a dynamic IP address. With a dynamic IP address, your IP address may change whenever you connect, which makes it difficult to connect to you.



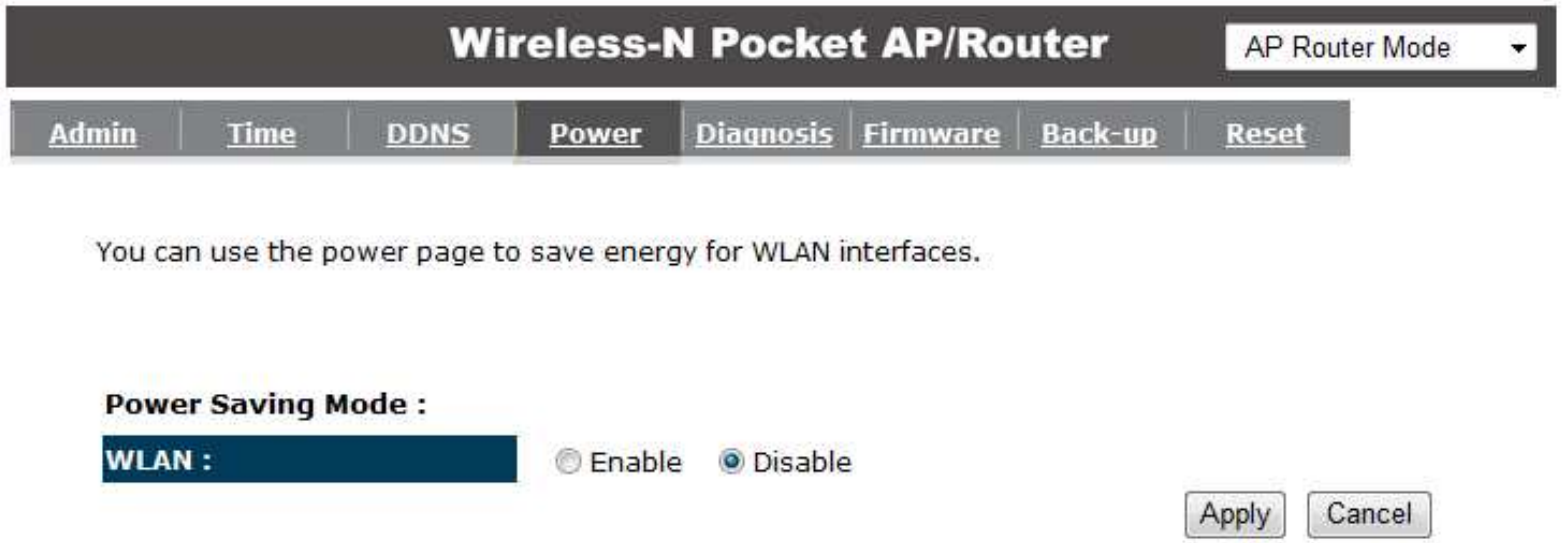
DDNS Services work as follows:

1. You must register for the service at one of the listed DDNS Service providers.
2. After registration, use the Service provider's normal procedure to obtain your desired Domain name.
3. Enter your DDNS data on the ETR-9305's DDNS screen, and enable the DDNS feature.
4. The Wireless Router will then automatically ensure that your current IP Address is recorded at the DDNS service provider's Domain Name Server.
5. From the Internet, users will be able to connect to your Virtual Servers (or DMZ PC) using your Domain name, as shown on this screen.

Dynamic DNS	
Dynamic DNS	Tick this box to Enable the DDNS feature.
Server Address:	Select the list of Dynamic DNS homes you would like to use from this list.
Username / Password:	Enter the Username and Password of your DDNS account.

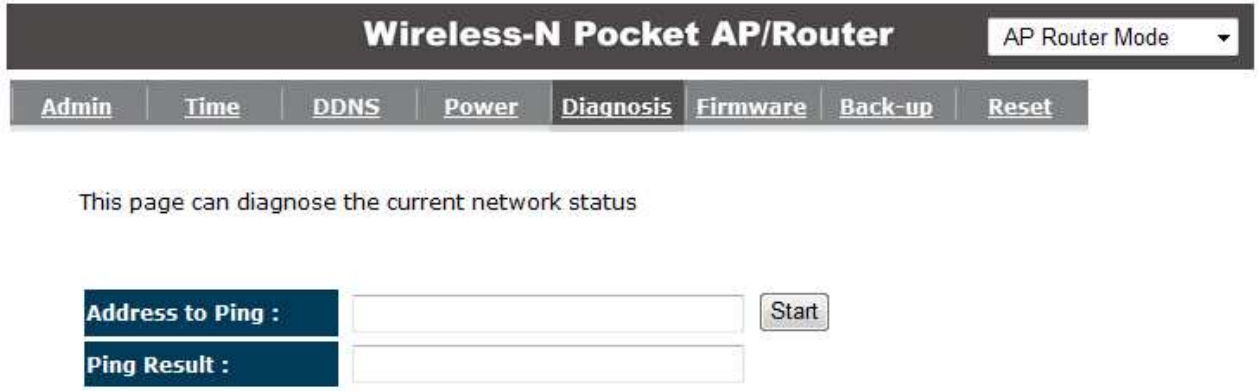
Power

This page allows you to Enable or Disable the wireless LAN power saving features.



Diagnosis

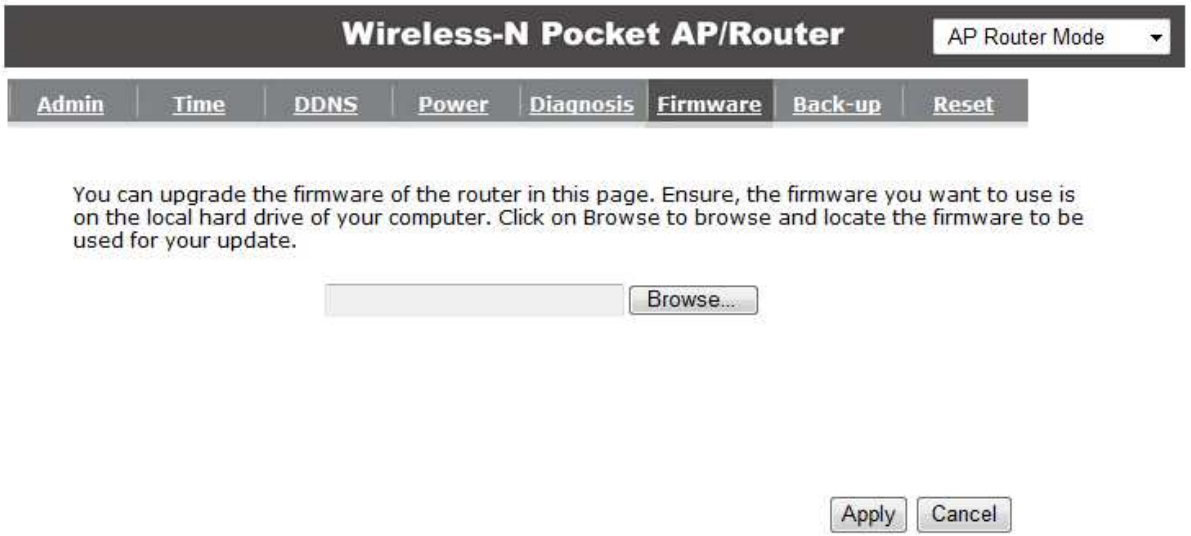
This page allows you determine if the TRAVEL ROUTER device has an active Internet connection.



Diagnosis	
Address to Ping:	Enter the IP address you like to see if a successful connection can be made.
Ping Result:	The results of the Ping test.

Firmware

The firmware (software) in the TRAVEL ROUTER device can be upgraded using your Web Browser.

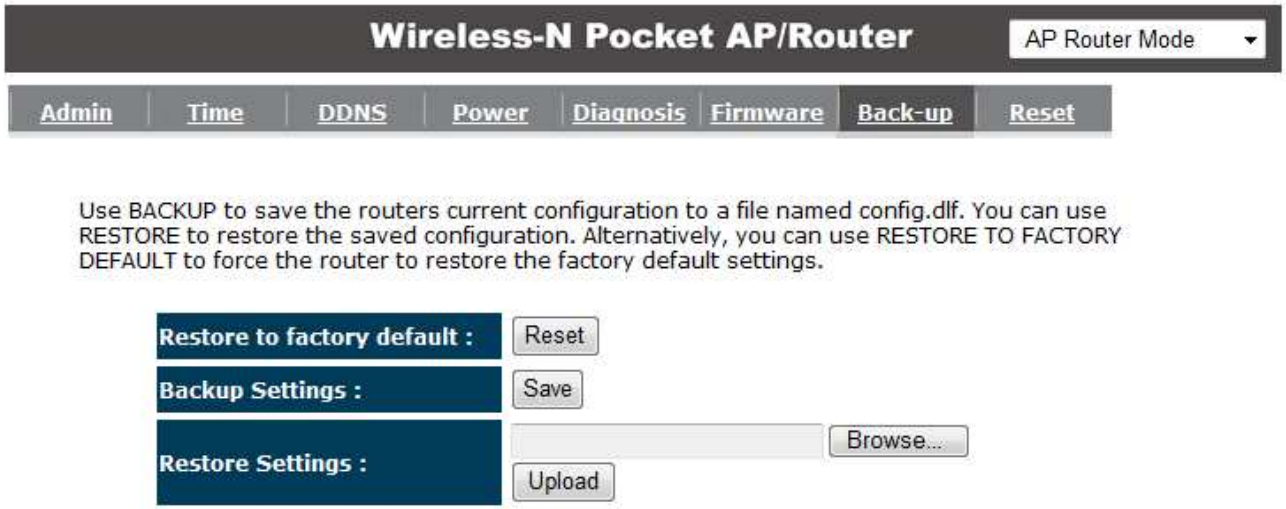


To perform the Firmware Upgrade:

1. Click the **Browse** button and navigate to the location of the upgrade file.
2. Select the upgrade file. Its name will appear in the *Upgrade File* field.
3. Click the **Apply** button to commence the firmware upgrade.

Note: The Wireless Router is unavailable during the upgrade process, and must restart when the upgrade is completed. Any connections to or through the Wireless Router will be lost.

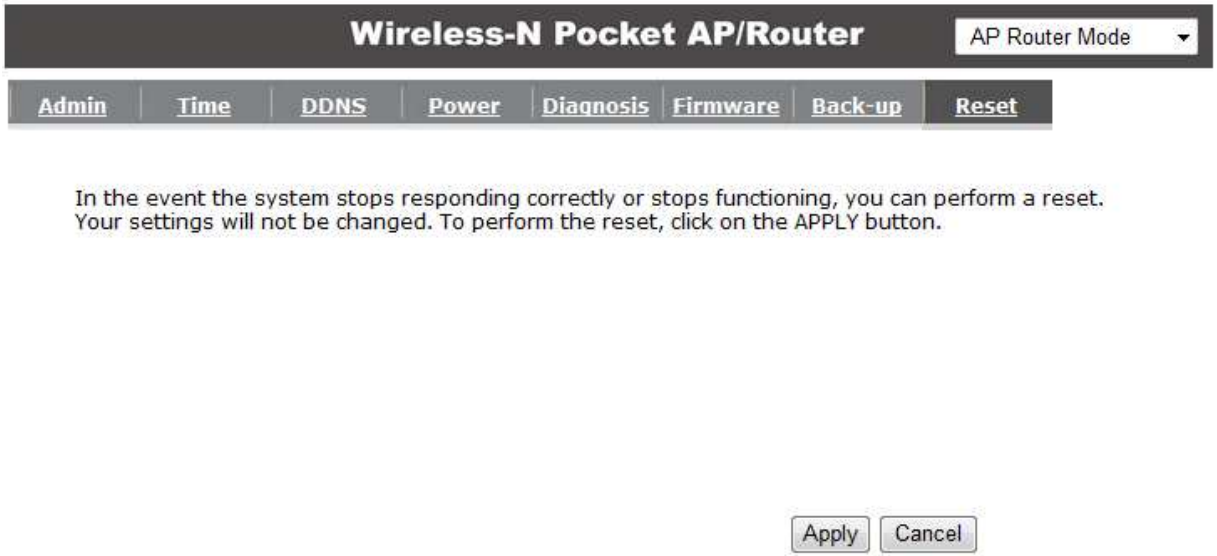
Back-up



Back-up	
Restore to factory default:	Restores the device to factory default settings.
Backup Settings:	Save the current configuration settings to a file.
Restore Settings:	Restores a previously saved configuration file. Click **Browse** to select the file. Then **Upload** to load the settings.

Reset

In some circumstances it may be required to force the device to reboot.



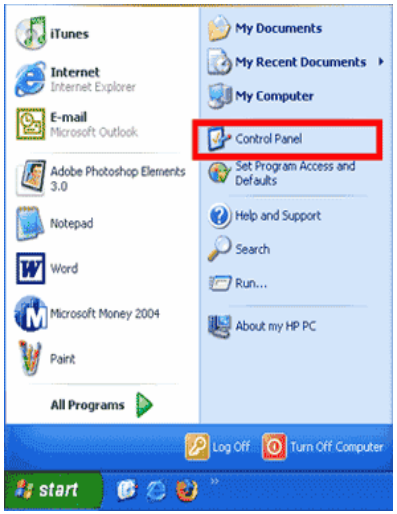
8.3 AP and Client Bridge Modes

When the TRAVEL ROUTER device is set to AP or Client Bridge modes, it will no longer allocate IP addresses to its wireless clients.

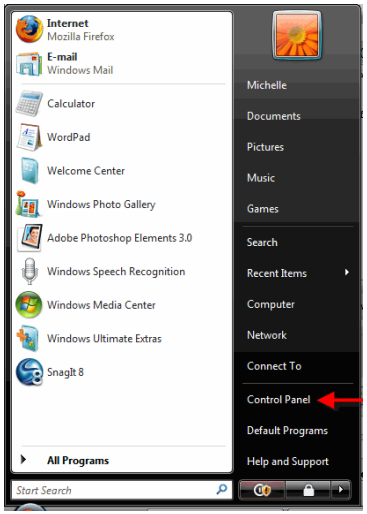
To access the Web-Based configuration page, please follow the following steps to set a static IP address (Windows XP/Vista).

1. Connect to the TRAVEL ROUTER using an Ethernet CAT.5 LAN Cable.

2. Click Start and open Control Panel.



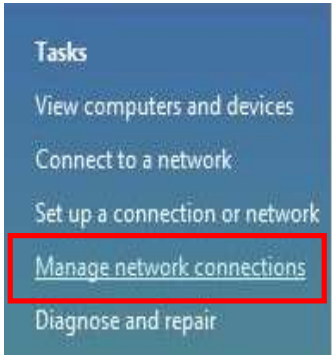
Windows XP



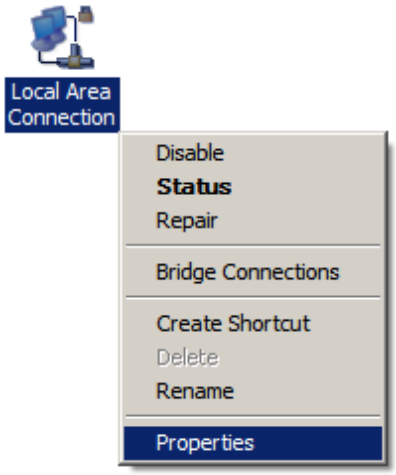
Windows Vista

3. Windows XP, click [**Network Connection]**

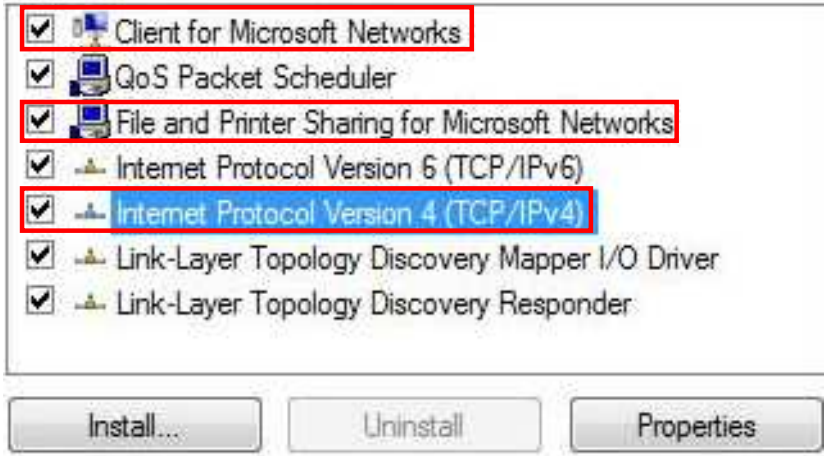
Windows Vista, click **[View Network Status and Tasks]** then **[Manage Network Connections]**



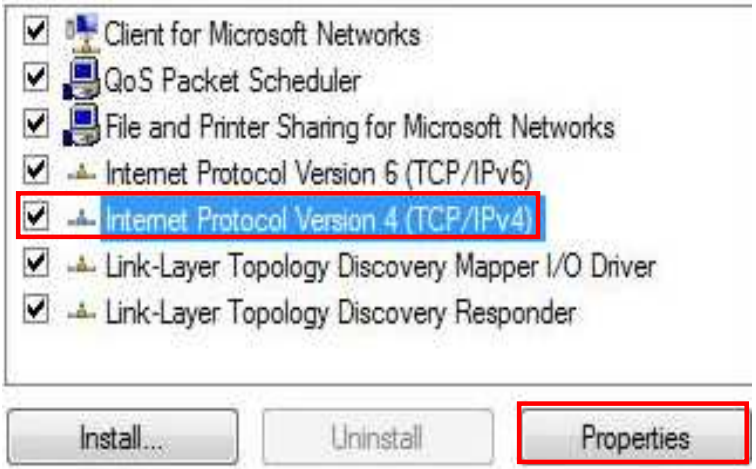
4. Right click on [**Local Area Connection**] and choose [**Properties**].



5. Check “Client for Microsoft Networks”, “File and Printer Sharing”, and “Internet Protocol (TCP/IP) is ticked. If not, please install them.

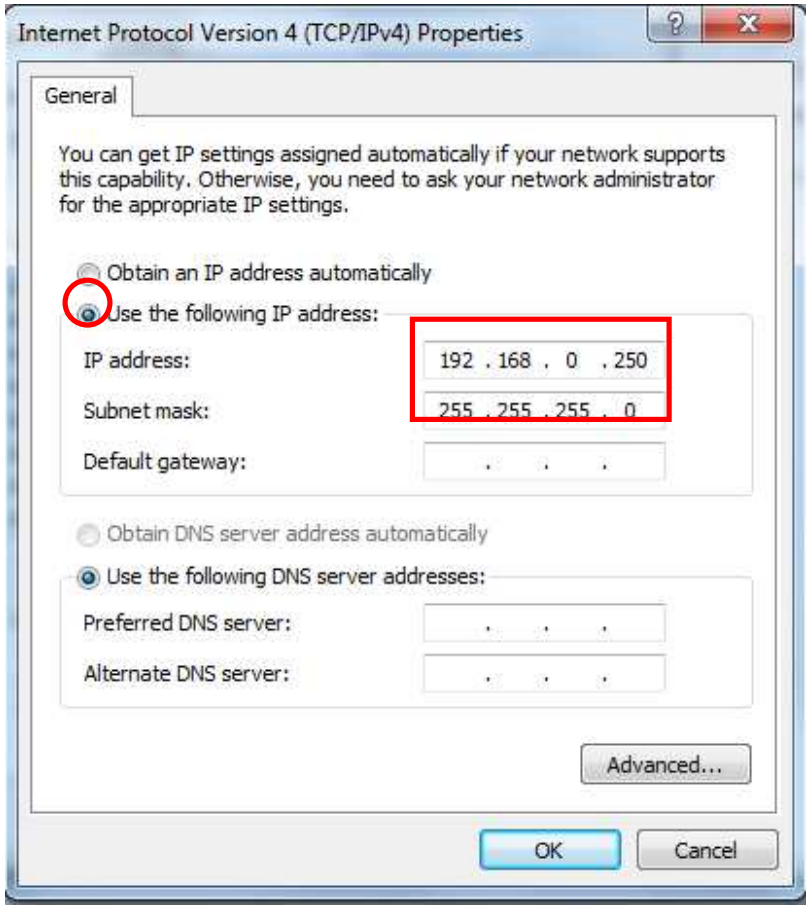


6. Select **“Internet Protocol (TCP/IP)”** and click [**Properties**]



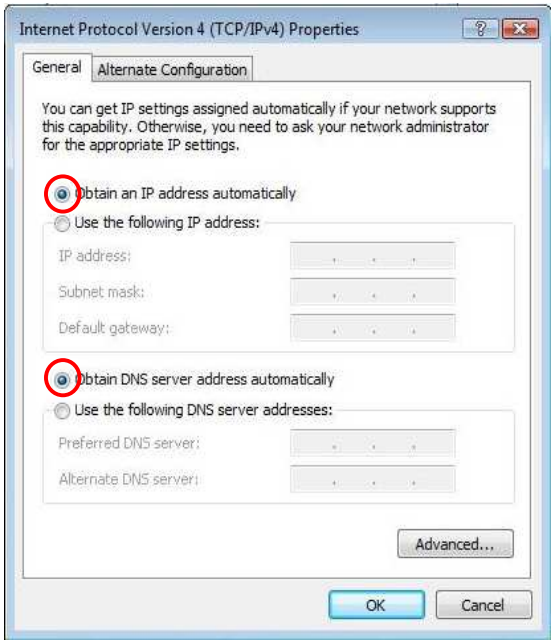
7. Manually set the IP Address. Then click **[OK]**

For example:
IP Address: 192.168.0.250
Subnet Mask: 255.255.255.0



8. You should now be able to access the Web-Based configuration in your Web Browser.

9. Remember to configure the settings back to **Obtain an IP Address Automatically** and **Obtain DNS Server Address Automatically** once you complete configuring the Web-Based interface.



8.4 Client Bridge Mode

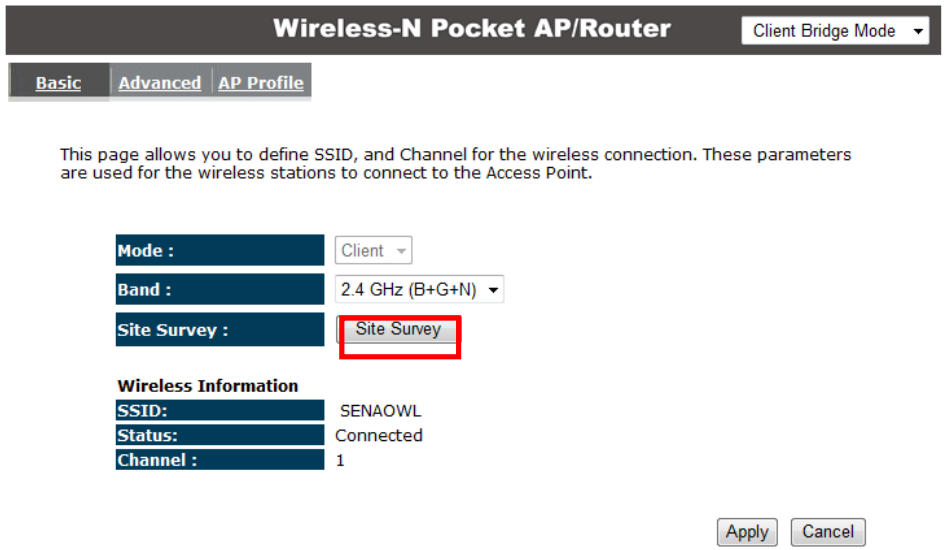
The Client Bridge mode turns the TRAVEL ROUTER into a wireless client, which then allows non-wireless devices to use its RJ45 port to access the network wirelessly.

8.4.1 Wireless

This section allows you to configure which wireless network the TRAVEL ROUTER will connect to.

Basic

1. Configure which wireless network the TRAVEL ROUTER will connect to in the Wireless Basic page.
2. Use the **Site Survey** button to scan the area for available wireless networks.



3. Select the SSID (wireless network) that you would like to connect to, and then click **Add to AP Profile**.

Site Survey

NO.	Select	Channel	SSID	BSSID	Encryption	Auth	Signal (%)	Mode
1	◉	1	SENAOWL	00:97:53:AA:11:1C	WEP	AUTOWEP	65	11b/g/n
2	○	1	SENAOWL	00:02:6F:53:0C:9B	WEP	AUTOWEP	81	11b/g
3	○	1	SENAOWL	00:02:6F:36:9C:9A	WEP	AUTOWEP	70	11b
4	○	1	SENAOVIP	00:02:6F:E0:02:12	NONE	OPEN	44	11b/g
5	○	1	EnGenius2	06:02:6F:10:10:12	NONE	OPEN	44	11b/g
6	○	1	EnGenius1	00:02:6F:10:10:12	NONE	OPEN	34	11b/g

4. Enter the wireless security settings for this SSID. Then click **Save** to apply the settings.

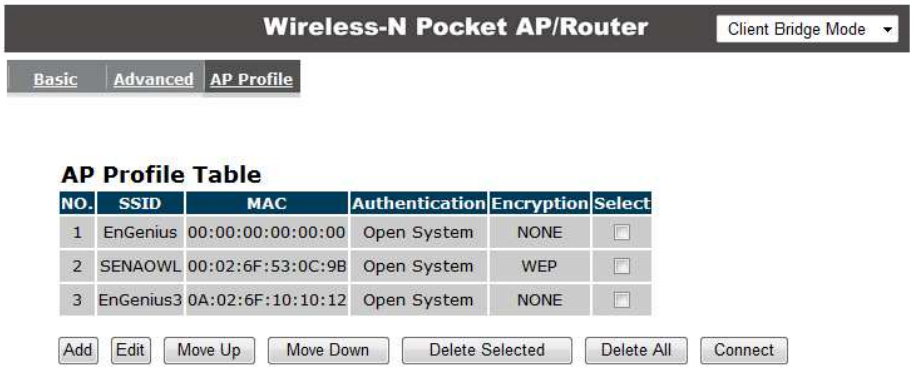
AP Profile Settings

Network Name (SSID) :	SENAOWL
Encryption :	WEP
Authentication Type :	◉ Open System ○ Shared Key
Key Length :	64-bit
Key type :	Hex (10 characters)
Default key :	Key 1
Encryption Key 1 :	**********
Encryption Key 2 :	**********
Encryption Key 3 :	**********
Encryption Key 4 :	**********

5. Change your IP Address settings back to **Obtain your IP Address Automatically**.
   You should now be connected to the wireless network through the TRAVEL ROUTER.

AP Profiles

You can save the settings up to three wireless networks. The TRAVEL ROUTER will automatically connect to the wireless network in order of priority.



AP Profile	
Add:	Manually Add a new SSID (wireless network) profile.
Edit:	Edit the SSID settings.
Move Up / Down:	Change the priority that the TRAVEL ROUTER will connect to these SSID's.
Delete Selected:	Deletes the selected SSID profile.
Delete All:	Deletes all SSID profiles.
Connect:	Force connection to this SSID.

Appendix A – FCC Interference Statement

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

We declare that the product is limited in CH1~CH11 by specified firmware controlled in the USA.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter ,except the evaluated 3G co-transmitting.

Appendix B – IC Interference Statement

Industry Canada statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.