

[Profile] The Station Profile page shows the settings and current operation status of the station.

Wireless 11n Router

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Station Profile

The Status page shows the settings and current operation status of the Station.

Profile List

	Profile	SSID	Channel	Authentication	Encryption	Network Type
<input checked="" type="checkbox"/>	PROF001	RT2561_1	Auto	OPEN	NONE	Infrastructure

[Link Status] The Station Link Status page shows the settings and current operation status of the Station.

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Station Link Status

The Status page shows the settings and current operation status of the Station.

Link Status

Status	RT2561_1 <--> 00-06-4F-17-93-28	
Extra Info	Link is Up	
Channel	1 <--> 2412000 KHz; Central Channel: 1	
Link Speed	Tx(Mbps) 54.0	Rx(Mbps) 54.0
Throughput	Tx(Kbps) 0.0	Rx(Kbps) 54.0
Link Quality	Good 100%	
Signal Strength 1	Good 80%	<input type="checkbox"/> dBm format
Signal Strength 2	Good 90%	
Signal Strength 3	Good 95%	
Noise Level	Strength	96%

HT

BW	20
GI	long
STBC	none
MCS	7
SNR0	26
SNR1	4978192

[Site Survey] Station Site Survey page can show information of APs nearby, you can choose one of these APs connecting or adding it to profile.

Wireless 11N Router

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Station Site Survey

Site survey page shows information of APs nearby. You may choose one of these APs connecting or adding it to profile.

Site Survey							
	SSID	BSSID	RSSI	Channel	Encryption	Authentication	Network Type
<input type="radio"/>	RT2561_1	00-06-4F-17-93-28	100%	1	Not Use	OPEN	Infrastructure
<input type="radio"/>	WR514VN_FTP_Server	00-0C-43-28-80-00	100%	1	TKIP; AES	WPA-PSK; WPA2-PSK	Infrastructure
<input type="radio"/>	testtest	00-0C-43-28-80-D8	100%	9	TKIP; AES	WPA-PSK; WPA2-PSK	Infrastructure

Connected <-> RT2561_1 Rescan Add Profile

For adding a profile, choose one AP and click **“Add Profile”**. And you will see the below screen for AP profile configuration. Enter the necessary information and apply the settings.

System Configuration		
Profile Name	PROF001	
SSID	RT2561_1	
Network Type	Infrastructure	
Power Saving Mode	<input checked="" type="radio"/> CAM (Constantly Awake Mode) <input type="radio"/> Power Saving Mode	
RTS Threshold	<input type="checkbox"/> Used 2347	
Fragment Threshold	<input type="checkbox"/> Used 2346	
Security Policy		
Security Mode	OPEN	
Wire Equivalence Protection (WEP)		
WEP Key Length	64 bit (10 hex digits / 5 ascii keys)	
WEP Key Entry Method	Hexadecimal	
WEP Keys	WEP Key 1 :	
	WEP Key 2 :	
	WEP Key 3 :	
	WEP Key 4 :	
Default Key	Key 1	

[Statistics] The Station Statistics page shows the settings and current operation status of the Station.

Station Statistics

The Status page shows the settings and current operation status of the Station.

Transmit Statistics	
Frames Transmitted Successfully	122
Frames Transmitted Successfully Without Retry	88
Frames Transmitted Successfully After Retry(s)	34
Frames Fail To Receive ACK After All Retries	0
RTS Frames Successfully Receive CTS	0
RTS Frames Fail To Receive CTS	0
Receive Statistics	
Frames Received Successfully	0
Frames Received With CRC Error	21440
Frames Dropped Due To Out-of-Resource	0
Duplicate Frames Received	7

Reset Counters

[Advance] The Station Advanced Configuration page shows the settings and current operation status of the station.

Station Advanced Configurations

The Status page shows the settings and current operation status of the Station.

Advance Configuration	
Wireless Mode(Infra)	802.11 B/G/N mixed mode
Country Region Code	11 B/G 0:CH1-11
B/G Protection	Auto
Tx Rate	Auto
<input checked="" type="checkbox"/> Tx Burst	
HT Physical Mode	
HT	<input checked="" type="radio"/> MM <input type="radio"/> GF
BW	<input type="radio"/> 20 <input checked="" type="radio"/> Auto
GI	<input type="radio"/> Long <input checked="" type="radio"/> Auto
MCS	Auto

RADIO OFF Apply

Wireless Mode: Select wireless mode. 802.11B/G mix, 802.11B only, 802.11G only, 802.11N only, 802.11 GN mix mode ,and 802.11B/G/N mix modes are supported.

Country Region Code: The available channel differs from different countries. For example: USA (FCC) is channel 1-11, Europe (ETSI) is channel 1-13. The operating frequency channel will be restricted to the country user located before importing. If you are in different country, you have to adjust the channel setting to comply the regulation of the country. Supporting region code for this section has CH1-11, CH10-11, CH10-13, CH14, CH1-14, CH3-9, and CH5-13. Please refer to below Channel Classification and range, Country Channel list to select your Country Region Code:

Country Name	Classification	Range	Country Name	Classification	Range
Argentina	0	CH1~11	Lebanon	1	CH1~13
Australia	1	CH1~13	Liechtenstein	1	CH1~13
Austria	1	CH1~13	Lithuania	1	CH1~13
Bahrain	1	CH1~13	Luxembourg	1	CH1~13
Belarus	1	CH1~13	Macedonia	1	CH1~13
Belgium	1	CH1~13	Malaysia	1	CH1~13
Bolivia	1	CH1~13	Mexico	0	CH1~11
Brazil	0	CH1~11	Morocco	1	CH1~13
Bulgaria	1	CH1~13	Netherlands	1	CH1~13
Canada	0	CH1~11	New Zealand	1	CH1~13
Chile	1	CH1~13	Nigeria	1	CH1~13
China	1	CH1~13	Norway	1	CH1~13
Colombia	0	CH1~11	Panama	1	CH1~13
Costa Rica	1	CH1~13	Paraguay	1	CH1~13
Croatia	1	CH1~13	Peru	1	CH1~13
Cyprus	1	CH1~13	Philippines	1	CH1~13
Czech Republic	1	CH1~13	Poland	1	CH1~13
Denmark	1	CH1~13	Portugal	1	CH1~13
Ecuador	1	CH1~13	Puerto Rico	1	CH1~13
Egypt	1	CH1~13	Romania	1	CH1~13
Estonia	1	CH1~13	Russia	1	CH1~13
Finland	1	CH1~13	Saudi Arabia	1	CH1~13
France	3	CH10~13	Singapore	1	CH1~13
France2	1	CH1~13	Slovakia	1	CH1~13
Germany	1	CH1~13	Slovenia	1	CH1~13
Greece	1	CH1~13	South Africa	1	CH1~13
Hong Kong	1	CH1~13	South Korea	1	CH1~13
Hungary	1	CH1~13	Spain	2	CH10~11
Iceland	1	CH1~13	Sweden	1	CH1~13
India	1	CH1~13	Switzerland	1	CH1~13
Indonesia	1	CH1~13	Taiwan	0	CH1~11
Ireland	1	CH1~13	Thailand	1	CH1~13
Israel	6	CH3-9	Turkey	1	CH1~13
Italy	1	CH1~13	United Arab Emirates	1	CH1~13
Japan	5	CH1~14	United Kingdom	1	CH1~13
Japan2	4	CH14~14	United States of America	0	CH1~11
Japan3	1	CH1~13	Uruguay	1	CH1~13
Jordan	3	CH10~13	Venezuela	1	CH1~13
Kuwait	1	CH1~13	Yugoslavia	0	CH1~11
Latvia	1	CH1~13			

Figure 1: Country Channel list

B/G Protection: User can choose from Auto, On, and Off

→ **Auto:** STA will dynamically change as AP announcement

→ **ON:** Always send frame with protection.

→ **Off:** Always send frame without protection.

TX Rate: Manually force the Transmit using selected rate. Default is auto.

Tx Burst: Frame burst mode.

HT Physical Mode: Configure HT Status in use, containing HT(MM or GF), BW(20 or Auto), GI(Long or Auto), and MCS(0~15, 32, or Auto) settings.

[QoS] The QoS configuration page can allow you to configure WMM and Direct Link settings

The screenshot displays the 'Station Advanced Configurations' page for a 'Wireless 11n Router'. The left sidebar shows a navigation tree with 'QoS' highlighted. The main content area is titled 'Station Advanced Configurations' and includes a description: 'The Status page shows the settings and current operation status of the Station.' Below this, there are three main sections: 'Qos Configuration', 'Direct Link Setup', and 'DLS Status'. The 'Qos Configuration' section has a table with the following settings: WMM (checked 'Enable'), WMM Power Saving (unchecked 'Enable'), PS Mode (radio buttons for AC_BE, AC_BK, AC_VI, AC_VO), and Direct Link Setup (unchecked 'Enable'). An 'Apply' button is below this section. The 'Direct Link Setup' section has a table with 'MAC Address' (input field with dashes) and 'Timeout Value' (input field followed by 'sec'). A 'DLS Apply' button is below. The 'DLS Status' section has a table with 'MAC Address' and 'Timeout' columns, and a 'Tear Down' button below.

(1) QoS Configuration

WMM: Enable Wi-Fi Multi-Media.

WMM Power Saving: Enable WMM Power Save.

PS Mode: Select which ACs you want to enable.

Direct Link Setup: Enable DLS (direct Link Setup).

(2) Direct Link Setup

MAC Address: Fill in the blanks of Direct Link with MAC address of STA. Connect with the same AP that supports DLS features

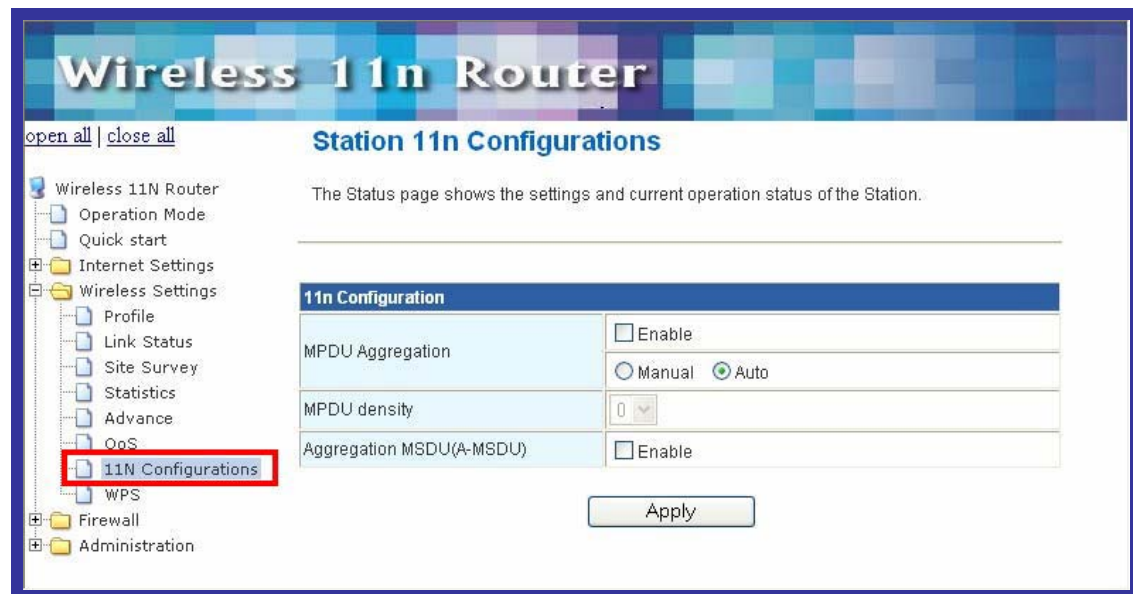
Timeout Value: Timeout Value represent that it disconnect automatically after some seconds. The value is integer. The integer must be between 0~65535. It represents that it always

connects if the value is zero.

(3) DLS Status

After configuring DLS successfully, show MAC address of the opposite side and Timeout Value of setting in “DLS Status”. In “DLS Status” of the opposite side, it shows MAC address of itself and Timeout Value of setting.

[11n Configurations] The Station 11n Configurations page shows the settings and current operation status of the station.

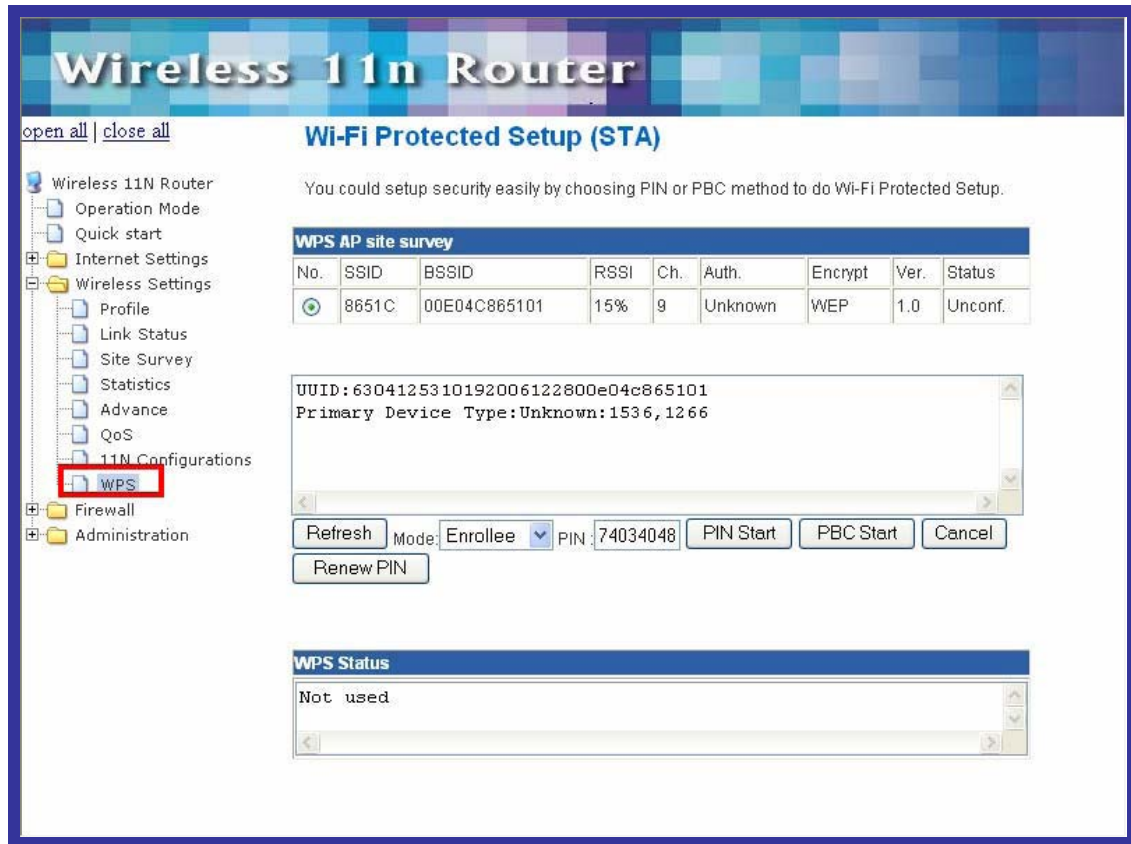


MPDU Aggregation: MPDU stands for MAC Protocol Data Unit. MPDUs are the fragmented units of MSDU, also called MAC frames, encapsulate the higher layer protocol data or contain MAC management messages.

MPDU Density: Select 0~7 to configure the MPDU density.

Aggregation MDSU (A-MSDU): A-MSDU stands for Aggregate MAC service data unit. This option allows aggregation of multiple MSDU in one MPDU. The MSDU is that unit of data that is received from the LLC sub-layer which lies above the MAC sub-layer in a protocol stack. The LLC and MAC sub-layers are collectively referred to as the DLL.

[WPS] You can setup security easily by choosing PIN or PBC method to do Wi-Fi Protected setup.



WPS AP Site Survey: Display the information of surrounding APs with WPS IE from last scan result. List information includes SSID, BSSID, RSSI, Channel, ID (Device Password ID), Auth., Encrypt, Ver., and Status.

Refresh: Issue a rescan command to wireless NIC to update information on surrounding wireless network.

Mode: Our station role-playing as an Enrollee or an external Registrar.

PIN : 8-digit numbers. It is required to enter PIN Code into Registrar using PIN method. Each NIC Wireless has only one PIN Code of Enrollee.

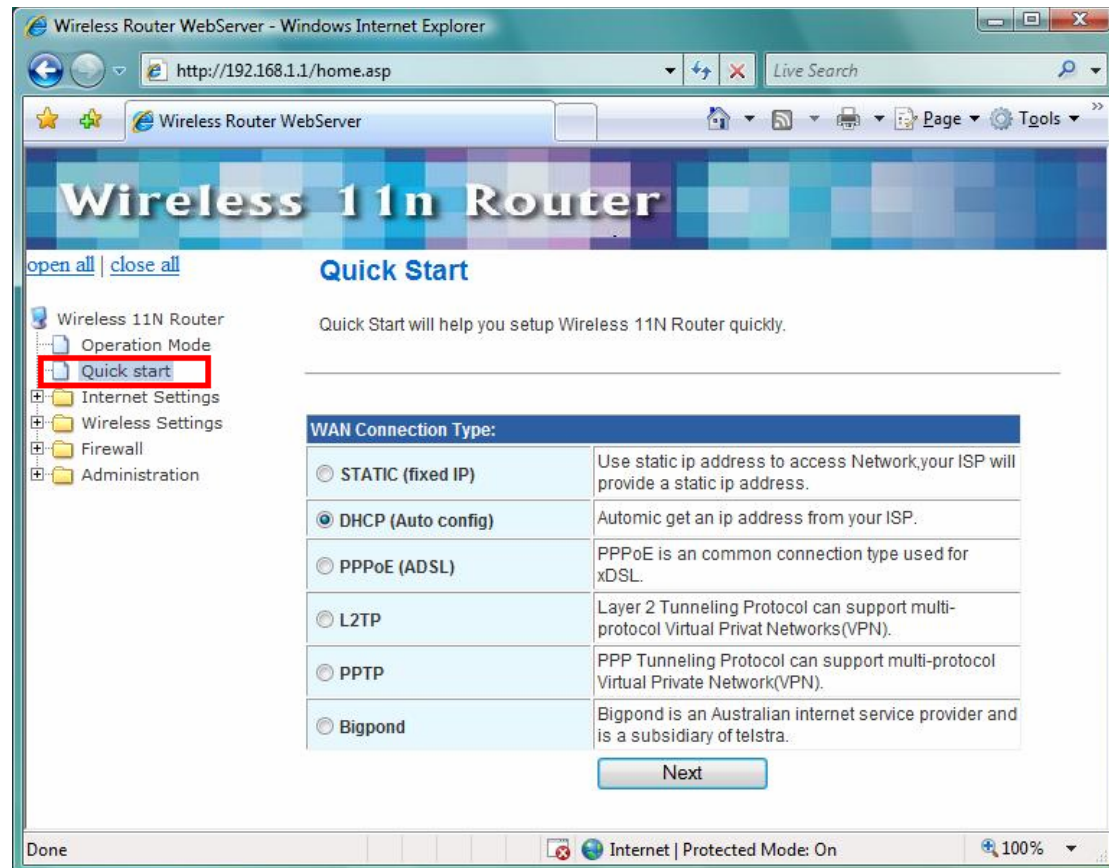
PIN Start: Start to add to Registrar using PIN configuration method. IF STA Registrar, remember that enter PIN Code read from you Enrollee before starting PIN.

PBC Start: Start to add to AP using PBC configuration method.

WPS Status: Display the current status of the WPS function.

3.3 Quick Start

Quick Start will help you setup Wireless 11n Router quickly. There have five types of WAN Connections: Static (Fixed IP), DHCP (Auto Config), PPPoE (ADSL), PPTP, L2TP, and BigPond.



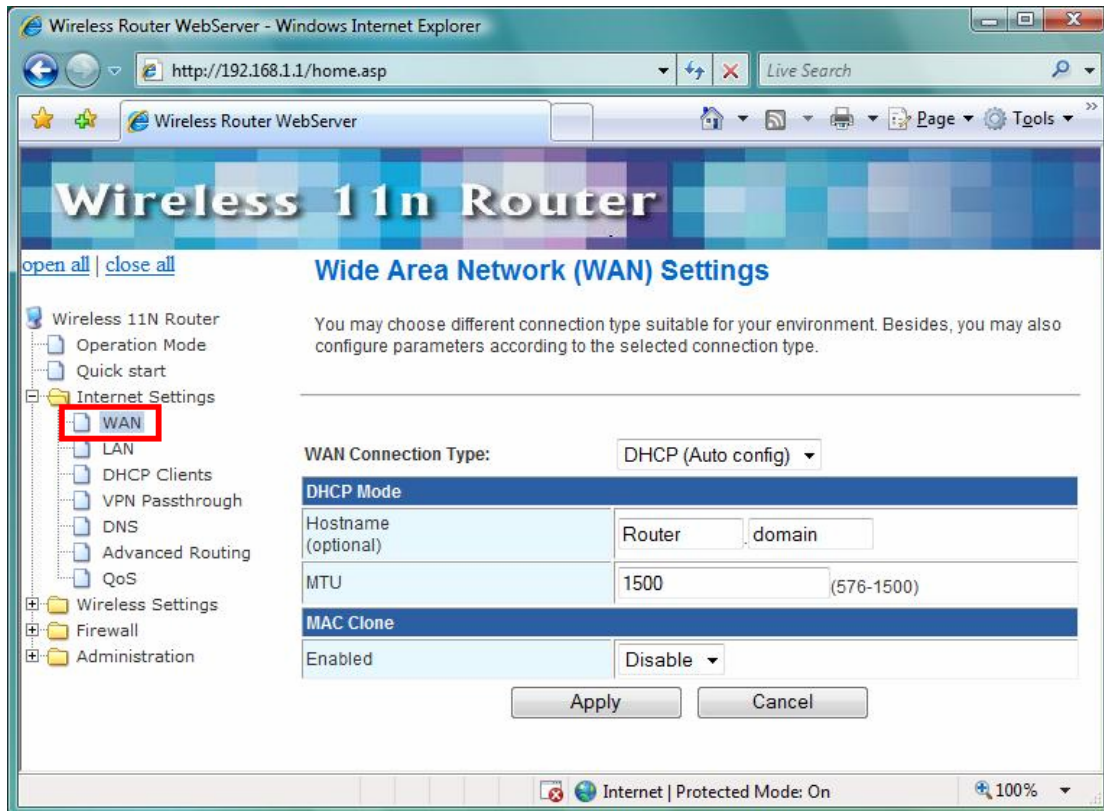
3.4 Internet Settings

The Internet Settings contains the following sections:

- WAN
- LAN
- DHCP Clients
- VPN Passthrough
- DNS
- Advanced Routing
- QoS

3.4.1 WAN

The WAN port is the connection of the 802.11n AP Router module to existing broadband device such as Cable modem or ADSL CPE. Click **WAN** on Internet Setting, below screen will prompt for WAN setting.



This AP Router supports 5 methods of obtaining the WAN IP Address:

- **Static IP (fixed IP):** Use static IP address to access Network. Your ISP will provide a static IP address.
- **DHCP (Auto Config):** Automatic gets IP address from your ISP.
- **PPPoE (ADSL):** PPPoE is a common connection type used for xDSL.
- **PPTP:** PPP Tunneling Protocol can support multi-protocol Virtual Private Network (VPN).
- **L2TP:** Layer 2 Tunneling Protocol can support multi-protocol Virtual Private Networks (VPN).
- **BigBond:** Bigbond is an Australian internet service provider and is a subsidiary of Telstra.

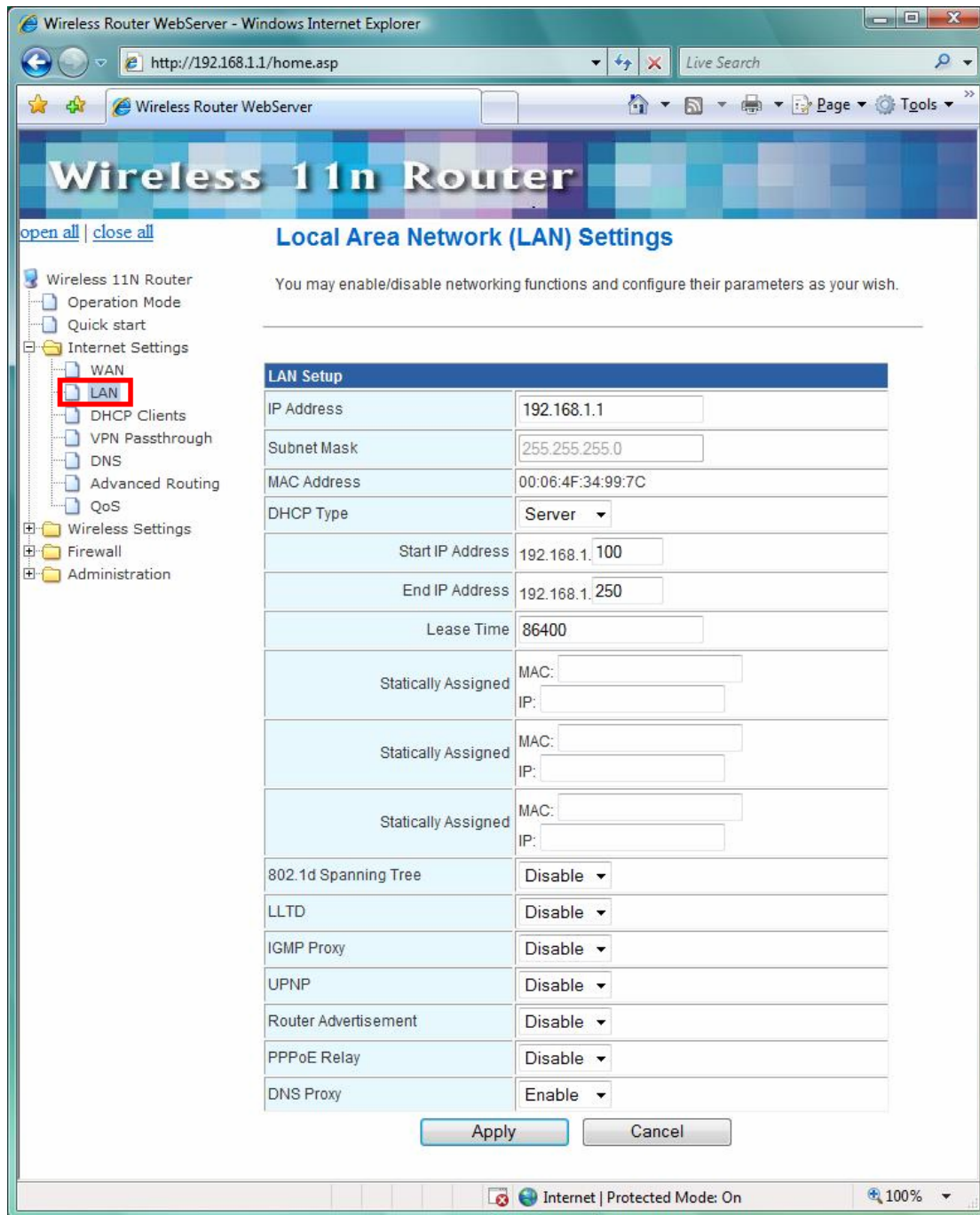
3.4.2 LAN

When the module operates in the Gateway mode, it supports the NAT (NAPT) feature. It means the WAN and LAN interfaces are located in different network segments and therefore the data traffic needs to be routed between the two interfaces.

To communicate with 802.11n router properly, must assign an IP address to the LAN port of the user's PC. There are two ways to assign a proper IP address to the user PC's LAN port:

- **Manual configuration of the user PC:** This required if the user configures the 802.11n router WAN port with a static IP address.
- **Dynamic IP assignment with DHCP:** 802.11n router can act as a DHCP server which dynamically assigns an IP address to user's PC located in the LAN-side network.

Click **LAN** on Internet Settings, below screen will prompt for LAN setting.



LAN IP Address: The LAN IP address. Default: **192.168.1.1**

Subnet Mask: The LAN net-mask. Default: **255.255.255.0**

DHCP Type: Select Disable to disable this Router to distribute IP address. Select Server to enable this Router to distribute IP addresses (DHCP server). And the following field will be activated for you to enter this starting IP address.

Start IP address: Specify the starting IP address of the IP address pool. Default Start IP: **192.168.1.100**.

End IP address: Specify the ending IP address of the IP address pool. Default End IP: **192.168.1.250**.