



WL-340/341/342

300N Wireless Router

(802.11bgn draft 2.0)



User Manual

Revision:1.1

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Introduction

Congratulations on your purchase of the WL-340/341/342 Wireless Network Broadband Router. The WL-340/341/342 is compliant with draft 802.11n v 2.0 up to 6 times faster than standard 802.11g based routers while still being compatible with 802.11g & 802.11b gadgets. The WL-340/341/342 is not only a Wireless Access Point, but also doubles as a 4-port full-duplex Switch that connects your wired-Ethernet devices together at.

At 300 Mbps wireless transmission rate, the Access Point built into the Router uses advanced MIMO (Multi-Input, Multi-Output) technology to transmit multiple streams of data in a single wireless channel, giving you seamless access to multimedia content. Robust RF signal travels farther, eliminates dead spots and extends network range. For data protection and privacy, the WL-340/341/342 encodes all wireless transmissions with WEP, WPA, and WPA2 encryption.

With the inbuilt DHCP Server & powerful SPI firewall, the WL-340/341/342 protects your computers against intruders and most known Internet attacks but provides safe VPN pass-through. With incredible speed and QoS function of 802.11n(draft2.0), the WL-340/341/342 is ideal for media-centric applications like streaming video, gaming, and VoIP telephony to run multiple media-intense data streams through the network at the same time, with no degradation in performance.

1 Key Features

Features	Advantages
Incredible Data Rate up to 300Mbps*	Heavy data payloads such as MPEG video streaming
IEEE 802.11n draft 2.0 Compliant and backward compatible with 802.11b/g	Fully Interoperable with IEEE 802.11b / IEEE802.11g compliant devices with legacy protection
Four 10/100 Mbps Fast Switch Ports (Auto-Crossover)	Scalability, extend your network.
Firewall supports Virtual Server Mapping, DMZ, IP Filter, ICMP Blocking, SPI	Avoids the attacks of Hackers or Viruses from Internet
Support 802.1x authenticator, 802.11i (WPA/WPA2, AES), VPN pass-through	Provide mutual authentication (Client and dynamic encryption keys to enhance security
WDS (Wireless Distribution System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater

** Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g, n chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate. All specifications are subject to change without notice.*

2 Package Contents

Open the package carefully, and make sure that none of the items listed below are missing. Do not discard the packing materials, in case of return; the unit must be shipped back in its original package.

1. WL-340/341/342 Router
2. 220V~240V Power Adapter
3. Quick Install Guide
4. CD (User's Manual)
5. Warranty card
6. UTP cable

3 Product Layout



Port	Description
Power connector	Connect the 12V DC adapter to this port
WAN (Blue)	Connect your ADSL/Cable modem to this port
LAN (Yellow)	Connect your PC's or network devices to this port

Backlabel

The backlabel describes the IP address, login details, SSID, security code and WPS button functionality.

To access the router configuration, type the following IP address in your internet browser: **192.168.0.1**
 Username: **admin** / Password: **admin**

To make a wireless connection with this router, choose the network:

Serial No.:

WPA2 code:



Model No: WL-341 v2 001





8 716502 019809

Made in China
Designed in Europe





WAN LAN LAN LAN LAN

Press **2** sec. = WPS mode
 Press **10** sec. = Reset
 Press **15** sec. = Factory default

Button	Description
WPS BUTTON	Press 2 seconds for WPS mode Press 10 seconds to reset the router Press 15 Seconds to reset the router to factory defaults.

LED Definition

From left to right.

Port	Description
LAN (Blue)	Shows the cable is connected.
LAN (Blue)	Shows the cable is connected.
LAN (Blue)	Shows the cable is connected.
LAN (Blue)	Shows the cable is connected.
WAN (Blue)	Shows the cable is connected.
WiFi (Blue)	Shows WiFi activity and WPS.
Power (Red)	Shows the device is turned on.



4 Network + System Requirements

To begin using the WL-340/341/342, make sure you meet the following as minimum requirements:

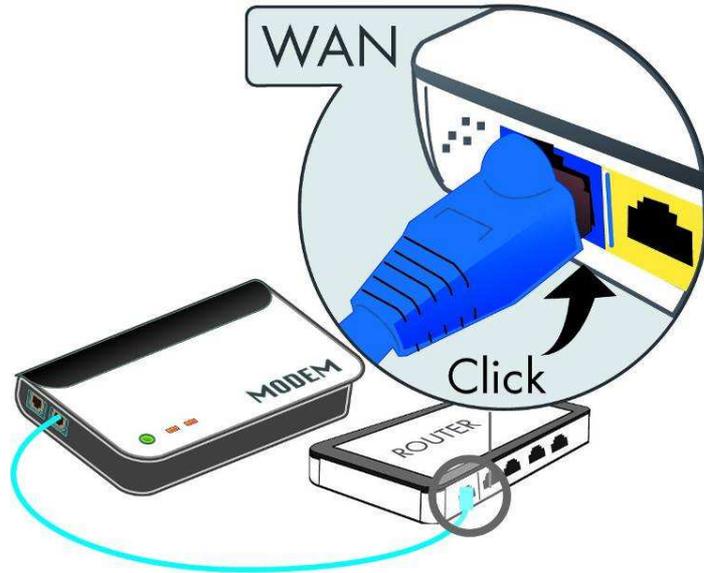
- PC/Notebook.
- Operating System – Microsoft Windows XP/2000/VISTA
- 1 Free Ethernet port.
- WiFi card/USB dongle (802.11 b/g/n) – optional.
- External xDSL (ADSL) or Cable modem with an Ethernet port (RJ-45).
- PC with a Web-Browser (Internet Explorer, Safari, Firefox, Opera)
- Ethernet compatible CAT5 cables.

5 WL-340/341/342 Placement

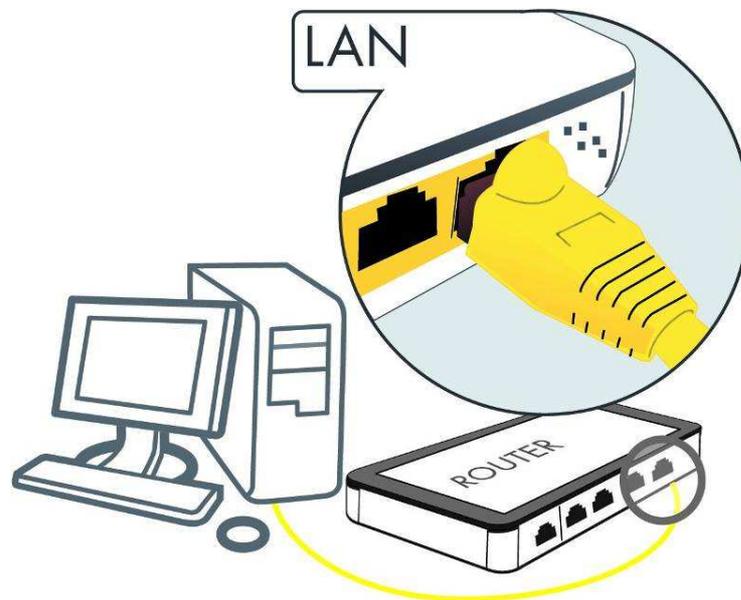
You can place the WL-340/341/342 on a desk or other flat surface, or you can mount it on a wall. For optimal performance, place your Wireless Broadband Router in the center of your office (or your home) in a location that is away from any potential source of interference, such as a metal wall or microwave oven. This location must be close to a power connection and your ADSL/Cable modem.

6 Setup LAN, WAN

WAN connection:

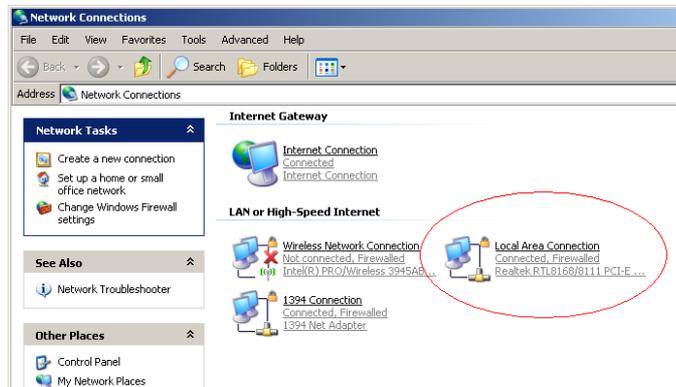


LAN connection:



7 PC Network Adapter setup (*Windows XP*)

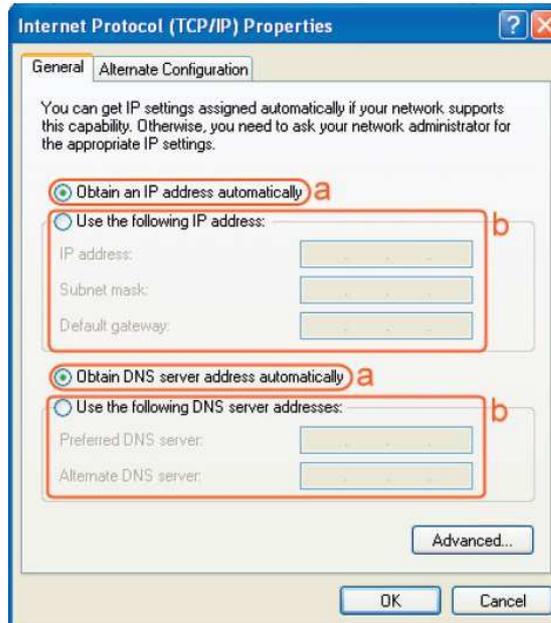
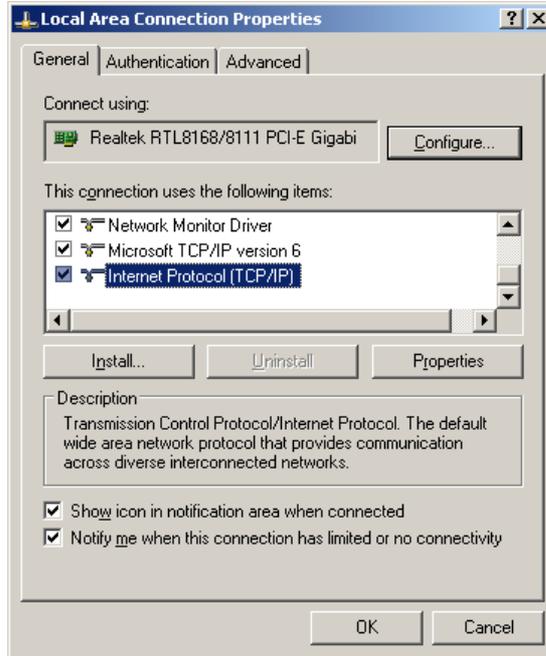
- Enter [Start Menu] → select [Control panel] → select [Network].



- Select [Local Area Connection]) icon=>select [properties]



- Select [Internet Protocol (TCP/IP)] =>Click [Properties].



- Select the [General] tab.
 - The WL-340/341/342 supports [DHCP] function, please select both [Obtain an IP address automatically] and [Obtain DNS server address automatically].

8 Bring up the WL-340/341/342

Connect the supplied power-adaptor to the power inlet port and connect it to a wall outlet. The WL-340/341/342 automatically enters the self-test phase. During self-test phase, the Power LED will be lit continuously to indicate that this product is in normal operation.

9 Initial Setup WL-340/341/342

LOGIN procedure

1. OPEN your browser (e.g. Internet Explorer).



2. Type **http://192.168.0.1** in address bar and press [Enter]



3. Type user name and password (default is admin/admin).



4. Click **OK**.
5. You will see the home page of the WL-340/341/342.



The System status section allows you to monitor the current status of your router the UP time, hardware information, serial number as well as firmware version information is displayed here.

LAN settings

The LAN tab gives you the opportunity to change the IP settings of the WL-340/341/342.

300N WIRELESS ROUTER SITECOM

Status Wizard Wireless Settings Firewall Advanced Settings Toolbox Choose your language

System Status **DHCP Server** Device Status Internet Status DHCP Status Log Statistics

You can enable the Broadband routers DHCP server to dynamically allocate IP Addresses to your LAN client PCs. The broadband router must have an IP Address for the Local Area Network.

LAN IP

IP Address :	192.168.0.1
IP Subnet Mask :	255.255.255.0
802.1d Spanning Tree :	Disabled
DHCP Server :	Enabled
Lease Time :	Forever

DHCP Server

Start IP :	192.168.0.100
End IP :	192.168.0.200
Domain Name :	sitecomwl341

Apply Cancel

Click **<Apply>** at the bottom of this screen to save any changes.

IP address 192.168.0.1. It is the router's LAN IP address (Your LAN clients default gateway IP address).

IP Subnet Mask 255.255.255.0 Specify a Subnet Mask for your LAN segment.

802.1d Spanning Tree is Disabled by default. If the 802.1d Spanning Tree function is enabled, this router will use the spanning tree protocol to prevent network loops.

DHCP Server Enabled by default. You can enable or disable the DHCP server. When DHCP is disabled no ip-addresses are assigned to clients and you have to use static ip-addresses. When DHCP server is enabled your computers will be assigned an ip-address automatically until the lease time expires.

Lease Time Forever. In the Lease Time setting you can specify the time period that the DHCP lends an IP address to your LAN clients. The DHCP will change your LAN client's IP address when this time threshold period is reached.

IP Address Pool You can select a particular IP address range for your DHCP server to issue IP addresses to your LAN Clients.

Note: default IP range 192.168.0.100 ↔ 192.168.0.200. If you want your PC(s) to have a static/fixed IP address, then you'll have to choose an IP address outside this IP address Pool

Domain Name You can specify a Domain Name for your LAN. Or just keep the default (sitecomwl34x).

Device Status

View the Broadband router's current configuration settings. Device Status displays the configuration settings you've configured in the Wizard / Basic Settings / Wireless Settings section.

300N WIRELESS ROUTER SITECOM

Status Wizard Wireless Settings Firewall Advanced Settings Toolbox Choose your language ▾

System Status DHCP Server **Device Status** Internet Status DHCP Status Log Statistics

View the current setting status of this device.

Wireless Configuration

Mode :	AP
ESSID :	Sitecom8C0008
Channel :	6
Security :	WPA2 pre-shared key
Associated Clients :	0
BSSID :	00:FF:52:8C:00:08

LAN Configuration

IP Address :	192.168.0.1
Subnet Mask :	255.255.255.0
DHCP Server :	Enabled
MAC Address :	00:FF:52:8C:00:08

Internet Status

This page displays whether the WAN port is connected to a Cable/DSL connection. It also displays the router's WAN IP address, Subnet Mask, and ISP Gateway as well as MAC address, the Primary DNS. Press **Renew** button to renew your WAN IP address.



300N WIRELESS ROUTER **SITECOM**

Status Wizard Wireless Settings Firewall Advanced Settings **Toolbox** Choose your language ▾

System Status DHCP Server Device Status **Internet Status** DHCP Status Log Statistics

View the current internet connection status and related information.

Attain IP Protocol :	Dynamic IP Address
IP Address :	---
Subnet Mask :	---
Default Gateway :	---
MAC Address :	00:EE:52:8C:00:02
Primary DNS :	---

Renew

DHCP Client Status

DHCP This page shows all DHCP clients (LAN PCs) currently connected to your network. The table shows the assigned IP address, MAC address and expiration time for each DHCP leased client. Use the Refresh button to update the available information.

You can check **Enable Static DHCP IP**. It is possible to add more static DHCP IPs. They are listed in the table **Current Static DHCP Table**. IP can be deleted at will from the table.

Click **apply** button to save the changed configuration.

300N ROUTER WIRELESS **SITECOM**

Status Wizard Wireless Settings Firewall Advanced Settings **Toolbox** Choose your language

System Status DHCP Server Device Status Internet Status **DHCP Status** Log Statistics

This table shows the assigned IP address, MAC address and expiration time for each DHCP leased client.

IP address	MAC address	Expiration Time
No DHCP.		

Refresh

Enable Static DHCP IP

IP address	MAC address
<input type="text"/>	<input type="text"/>

Add Reset

Current Static DHCP Table:

NO.	IP address	MAC address	Select
-----	------------	-------------	--------

Delete Selected Delete All Reset

Apply Cancel

WL-340/341/342 Log

View the operation **log of the WL-340/341/342**. This page shows the current system log of the Broadband router. It displays any event occurred after system start up. At the bottom of the page, the system log can be saved **<Save>** to a local file for further processing or the system log can be cleared **<Clear>** or it can be refreshed **<Refresh>** to get the most updated information. When the system is powered down, the system log will disappear if not saved to a local file.



The screenshot displays the management interface for a 300N ROUTER WIRELESS by SITECOM. The interface includes a navigation menu with tabs for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, and Toolbox. Below this, there are sub-tabs for System Status, DHCP Server, Device Status, Internet Status, DHCP Status, Log, and Statistics. The Log tab is selected, showing a scrollable text area with the following system log entries:

```
day 1 00:00:06 [SYSTEM]: WAN, No PHY Link
day 1 00:00:06 [SYSTEM]: WAN, start DHCP mode
day 1 00:00:04 [SYSTEM]: WAN, stop DHCP mode
day 1 00:00:03 [SYSTEM]: WAN, stop DHCP mode
day 1 00:00:02 [SYSTEM]: HTTP, start
day 1 00:00:01 [SYSTEM]: NET, start Firewall
day 1 00:00:01 [SYSTEM]: NET, start NAT
day 1 00:00:01 [SYSTEM]: NTP, start NTP Client
day 1 00:00:01 [SYSTEM]: DNS, start DNS Proxy
day 1 00:00:01 [SYSTEM]: DHCP, start DHCP Server
day 1 00:00:01 [SYSTEM]: WAN, No PHY Link
day 1 00:00:01 [SYSTEM]: WAN, start DHCP mode
day 1 00:00:01 [SYSTEM]: WAN, stop DHCP mode
day 1 00:00:01 [SYSTEM]: WLAN, Channel = 11
day 1 00:00:00 [SYSTEM]: LAN, IP address=192.168.0.1
day 1 00:00:00 [SYSTEM]: LAN, start
day 1 00:00:00 [SYSTEM]: BR, start
day 1 00:00:00 [SYSTEM]: Start Log Message Service!
```

At the bottom of the log area, there are three buttons: Save, Clear, and Refresh.

WL-340/341/342 Statistics

Shows the counters of packets sent and received on WAN, LAN & WLAN.

300N WIRELESS ROUTER **SITECOM**

Status Wizard Wireless Settings Firewall Advanced Settings **Toolbox** Choose your language ▾

System Status DHCP Server Device Status Internet Status DHCP Status Log **Statistics**

This page shows the packet counters for transmission and reception regarding to networks.

Wireless LAN :	Sent Packets	22
	Received Packets	2208
Ethernet LAN :	Sent Packets	421
	Received Packets	398
Ethernet WAN :	Sent Packets	0
	Received Packets	0

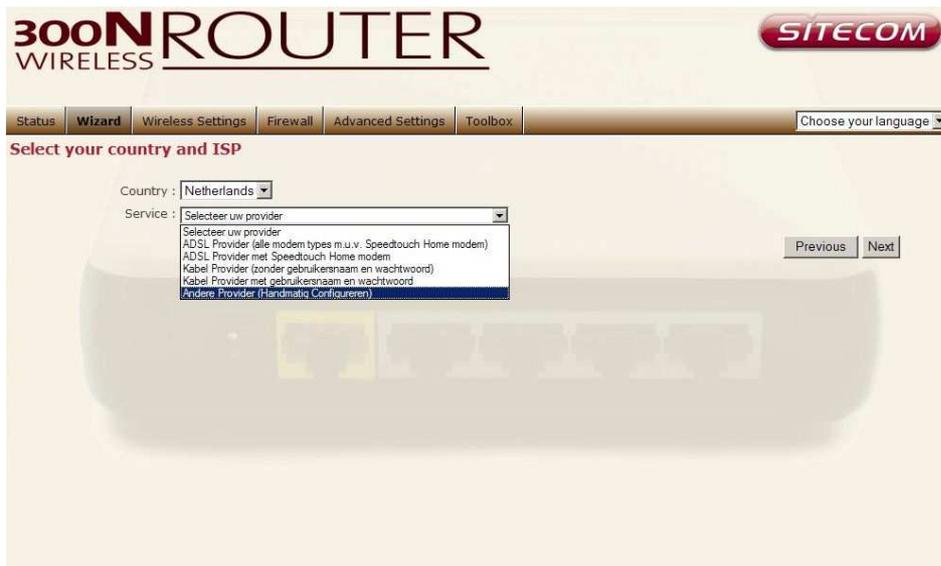
Refresh

10 Configuration Wizard

Click **Wizard** to configure the router. The Setup wizard will now be displayed; check that the modem is connected and click **Next**.



Select your country from the Country list. Select your internet provider. Click **Next**.



Depending on the chosen provider, you may need to enter your user name and password, MAC address or hostname in the following window. After you have entered the correct information, click **Next**.

300N WIRELESS ROUTER **SITECOM**

Status **Wizard** Wireless Settings Firewall Advanced Settings Toolbox Choose your language ▾

Please, enter the data which is supplied by your ISP.

Hostname : (Alleen voor oudere @home verbindingen)

MAC Address : Clone MAC address

Previous Apply Cancel



300N WIRELESS ROUTER **SITECOM**

Status **Wizard** Wireless Settings Firewall Advanced Settings Toolbox Choose your language ▾

Please, enter the data which is supplied by your ISP.

Login Method : PPP over Ethernet

Username :

Password :

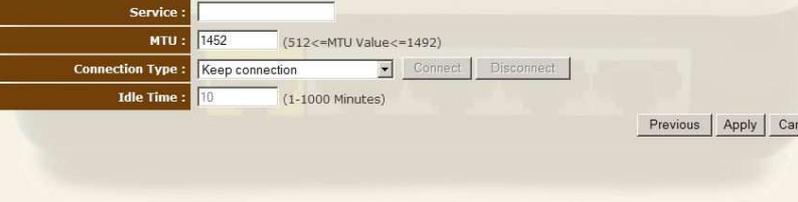
Service :

MTU : (512<=MTU Value<=1492)

Connection Type : Connect Disconnect

Idle Time : (1-1000 Minutes)

Previous Apply Cancel



Click **APPLY** to complete the configuration.

11 Wireless Settings

You can set parameters that are used for the wireless stations to connect to this router. The parameters include Mode, ESSID, Channel Number and Associated Client.

Wireless Function



Enable or Disable Wireless function here. Click **Apply** and wait for module to be ready & loaded.

Basic Settings



The screenshot shows the configuration interface for a Sitecom 300N Wireless Router. The page title is "300N WIRELESS ROUTER" with the Sitecom logo. The navigation menu includes Status, Wizard, Wireless Settings (selected), Firewall, Advanced Settings, and Toolbox. There is a language selection dropdown. Below the navigation, there are tabs for Enable, Basic (selected), Advanced, Security, ACL, and WPS. The main content area contains a descriptive paragraph: "This page allows you to define ESSID, and Channel for the wireless connection. These parameters are used for the wireless stations to connect to the Access Point." Below this are four configuration fields: Mode (dropdown menu set to AP), Band (dropdown menu set to 2.4 GHz (B+G+N)), ESSID (text input field containing Sitecom8C0008), and Channel (dropdown menu set to 11). At the bottom right of the form are Apply and Cancel buttons.

Mode Allows you to set the AP to AP, Station, Bridge or WDS mode.

Band Allows you to set the AP fixed at 802.11b or 802.11g mode. You can also select B+G mode to allow 802.11b and 802.11g clients at the same time.

ESSID This is the name of the wireless signal which is broadcasted. All the devices in the same wireless LAN should have the same ESSID.

Channel The channel used by the wireless LAN. All devices in the same wireless LAN should use the same channel.

Advanced Settings

This tab allows you to set the advanced wireless options. The options included are Authentication Type, Fragment Threshold, RTS Threshold, Beacon Interval, and Preamble Type. You should not change these parameters unless you know what effect the changes will have on the router.

The screenshot shows the 'Advanced Settings' tab for a wireless router. The page has a navigation bar with tabs: Status, Wizard, **Wireless Settings**, Firewall, Advanced Settings, and Toolbox. Below this is a sub-navigation bar with tabs: Enable, Basic, **Advanced**, Security, ACL, and WPS. A warning message states: 'These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Broadband router.' The main settings area includes: Authentication Type (radio buttons for Open System, Shared Key, and Auto, with Auto selected); Fragment Threshold (input field 2346, range 256-2346); RTS Threshold (input field 2347, range 0-2347); Beacon Interval (input field 100, range 20-1024 ms); DTIM Period (input field 1, range 1-10); Data Rate (dropdown menu set to Auto); N Data Rate (dropdown menu set to Auto); Channel Bandwidth (radio buttons for Auto 20/40 MHz and 20 MHz, with Auto 20/40 MHz selected); Preamble Type (radio buttons for Long Preamble and Short Preamble, with Short Preamble selected); Broadcast ESSID (radio buttons for Enable and Disable, with Enable selected); CTS Protection (radio buttons for Auto, Always, and None, with None selected); Tx Power (dropdown menu set to 100%); and WMM (radio buttons for Enable and Disable, with Enable selected).

Authentication Type There are two authentication types: "Open System" and "Shared Key". When you select "Open System", wireless stations can associate with this wireless router without WEP encryption. When you select "Shared Key", you should also setup a WEP key in the "Encryption" page. After this has been done, make sure the wireless clients that you want to connect to the device are also setup with the same encryption key.

Fragment Threshold "Fragment Threshold" specifies the maximum size of a packet during the fragmentation of data to be transmitted. If you set this value too low, it will result in bad performance.

RTS Threshold When the packet size is smaller than the RTS threshold, the wireless router will not use the RTS/CTS mechanism to send this packet.

Beacon Interval is the interval of time that this wireless router broadcasts a beacon. A Beacon is used to synchronize the wireless network.

Data Rate The "Data Rate" is the rate that this access point uses to transmit data packets. The access point will use the highest possible selected transmission rate to transmit the data packets.

N Data Rate The "Data Rate" is the rate that this access point uses to transmit data packets for N compliant wireless nodes. Highest to lowest data rate can be fixed.

Channel Bandwidth is the range of frequencies that will be used.

Preamble Type The "Long Preamble" can provide better wireless LAN compatibility while the "Short Preamble" can provide better wireless LAN performance.

Broadcast ESSID If you enabled "Broadcast ESSID", every wireless station located within the coverage of this access point can discover this access point easily. If you are building a public wireless network, enabling this feature is recommended. Disabling "Broadcast ESSID" can provide better security.

CTS Protection: It is recommended to enable the protection mechanism. This mechanism can decrease the rate of data collision between 802.11b and 802.11g wireless stations. When the protection mode is enabled, the throughput of the AP will be a little lower due to a lot of frame-network that is transmitted.

TX Power can be set to a bare minimum or maximum power.

WMM WiFi Multi Media if enabled supports QoS for experiencing better audio, video and voice in applications.

Security

This Access Point provides complete wireless LAN security functions, included are WEP, IEEE 802.11x, IEEE 802.11x with WEP, WPA with pre-shared key and WPA with RADIUS. With these security functions, you can prevent your wireless LAN from illegal access. Please make sure your wireless stations use the same security function, and are setup with the same security key.

Disable

When you choose to disable encryption, it is very insecure to operate the WL-340/341/342.



The screenshot shows a web interface for configuring wireless security. At the top, there are tabs for 'Enable', 'Basic', 'Advanced', 'Security', 'ACL', and 'WPS'. The 'Security' tab is selected. Below the tabs, a message states: 'This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.' The 'Encryption' dropdown menu is set to 'Disable'. There is an unchecked checkbox for 'Enable 802.1x Authentication'. At the bottom right, there are 'Apply' and 'Cancel' buttons.

Enable 802.1x Auth

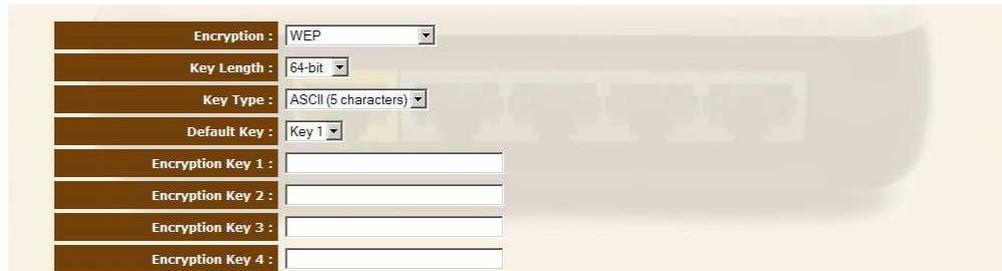
IEEE 802.1x is an authentication protocol. Every user must use a valid account to login to this Access Point before accessing the wireless LAN. The authentication is processed by a RADIUS server. This mode only authenticates users by IEEE 802.1x, but it does not encrypt the data during communication



The screenshot shows the 'Enable 802.1x Authentication' section of the security configuration page. The checkbox for 'Enable 802.1x Authentication' is checked. Below it, there are three input fields: 'RADIUS Server IP Address' (empty), 'RADIUS Server Port' (set to 1812), and 'RADIUS Server Password' (empty). At the bottom right, there are 'Apply' and 'Cancel' buttons.

WEP

When you select 64-bit or 128-bit WEP key, you have to enter WEP keys to encrypt data. You can generate the key by yourself and enter it. You can enter four WEP keys and select one of them as a default key. Then the router can receive any packets encrypted by one of the four keys.



The image shows a configuration interface for WEP encryption. It features a table with the following fields:

Encryption :	WEP
Key Length :	64-bit
Key Type :	ASCII (5 characters)
Default Key :	Key 1
Encryption Key 1 :	
Encryption Key 2 :	
Encryption Key 3 :	
Encryption Key 4 :	

Key Length You can select the WEP key length for encryption, 64-bit or 128-bit. The larger the key will be the higher level of security is used, but the throughput will be lower.

Key Format You may select ASCII Characters (alphanumeric format) or Hexadecimal Digits (in the "A-F", "a-f" and "0-9" range) to be the WEP Key.

Key1 - Key4 The WEP keys are used to encrypt data transmitted in the wireless network. Use the following rules to setup a WEP key on the device. 64-bit WEP: input 10-digits Hex values (in the "A-F", "a-f" and "0-9" range) or 5-digit ASCII character as the encryption keys. 128-bit WEP: input 26-digit Hex values (in the "A-F", "a-f" and "0-9" range) or 13-digit ASCII characters as the encryption keys.

Click <Apply> at the bottom of the screen to save the above configurations. You can now configure other sections by choosing Continue, or choose Apply to apply the settings and reboot the device.

WPA Pre-shared Key

Wi-Fi Protected Access (WPA) is an advanced security standard. You can use a pre-shared key to authenticate wireless stations and encrypt data during communication. It uses TKIP or CCMP (AES) to change the encryption key frequently. So the encryption key is not easy to be cracked by hackers. This is the best security available.



The screenshot shows a configuration window for WPA Pre-shared Key. It features four rows of settings:

- Encryption :** A dropdown menu set to "WPA pre-shared key".
- WPA Type :** Three radio buttons: "WPA(TKIP)" (selected), "WPA2(AES)", and "WPA2 Mixed".
- Pre-shared Key Type :** A dropdown menu set to "Passphrase".
- Pre-sharedKey :** An empty text input field.

At the bottom right, there are two buttons: "Apply" and "Cancel".

WPA-Radius

Wi-Fi Protected Access (**WPA**) is an advanced security standard. You can use an external RADIUS server to authenticate wireless stations and provide the session key to encrypt data during communication. It uses **TKIP** or CCMP (**AES**) to change the encryption key frequently. Press **Apply** button when you are done.



The screenshot shows a configuration window for WPA-Radius. It features five rows of settings:

- Encryption :** A dropdown menu set to "WPA RADIUS".
- WPA Type :** Three radio buttons: "WPA(TKIP)" (selected), "WPA2(AES)", and "WPA2 Mixed".
- RADIUS Server IP Address :** An empty text input field.
- RADIUS Server Port :** A text input field containing "1812".
- RADIUS Server Password :** An empty text input field.

At the bottom right, there are two buttons: "Apply" and "Cancel".

ACL

This wireless router supports MAC Address Control, which prevents unauthorized clients from accessing your wireless network.

300N WIRELESS ROUTER SITECOM

Status Wizard **Wireless Settings** Firewall Advanced Settings Toolbox Choose your language ▼

Enable Basic Advanced Security **ACL** WPS

For security reason, the Access Point features MAC Address Filtering which only allows authorized MAC Addresses to associate with the Access Point.

MAC Address Filtering Table

NO.	MAC address	Comment	Select
-----	-------------	---------	--------

Delete Selected Delete All Reset

Enable Wireless Access Control

New : MAC address : Comment : Add Reset

Apply Cancel

Enable wireless access control Enables the wireless access control function

Adding an address into the list Enter the "MAC Address" and "Comment" of the wireless station to be added and then click "Add". The wireless station will now be added into the "Current Access Control List" below. If you are having any difficulties filling in the fields, just click "Clear" and both "MAC Address" and "Comment" fields will be cleared.

Remove an address from the list If you want to remove a MAC address from the "Current Access Control List", select the MAC address that you want to remove in the list and then click "Delete Selected". If you want to remove all the MAC addresses from the list, just click the "Delete All" button. Click "Reset" will clear your current selections.

Click <Apply> at the bottom of the screen to save the above configurations. You can now configure other sections by choosing Continue, or choose Apply to apply the settings and reboot the device.

WPS

Wi-Fi Protected Setup (WPS) is the simplest way to establish a connection between the wireless clients and the wireless router. You don't have to select the encryption mode and fill in a long encryption passphrase every time when you try to setup a wireless connection. You only need to press a button on both wireless client and wireless router, and WPS will do the rest for you.

The wireless router supports two types of WPS: WPS via Push Button and WPS via PIN code. If you want to use the Push Button, you have to push a specific button on the wireless client or in the utility of the wireless client to start the WPS mode, and switch the wireless router to WPS mode. You can simply push the WPS button of the wireless router, or click the 'Start to Process' button in the web configuration interface. If you want to use the PIN code, you have to know the PIN code of the wireless client and switch it to WPS mode, then fill-in the PIN code of the wireless client through the web configuration interface of the wireless router.



The screenshot shows the web configuration interface for a 300N WIRELESS ROUTER. The interface includes a navigation menu with options like Status, Wizard, Wireless Settings, Firewall, Advanced Settings, and Toolbox. The 'Wireless Settings' section is active, and the 'WPS' tab is selected. The WPS settings are as follows:

WPS :	<input checked="" type="checkbox"/> Enable
Wi-Fi Protected Setup Information	
WPS Current Status :	unConfigured
Self Pin Code :	91750488
SSID :	Sitecom8C0008
Authentication Mode :	Disable
Passphrase Key :	<input type="text"/>
WPS Via Push Button :	<input type="button" value="Start to Process"/>
WPS Via PIN :	<input type="text"/> <input type="button" value="Start to Process"/>

WPS Check the box to enable WPS function and uncheck it to disable the WPS function.

WPS Current Status If the wireless security (encryption) function of this wireless router is properly set, you'll see a 'Configured' message here. Otherwise, you'll see 'UnConfigured'.

Self Pin Code This is the WPS PIN code of the wireless router. You may need this information when connecting to other WPS-enabled wireless devices.

SSID This is the network broadcast name (SSID) of the router.

Authentication Mode It shows the active authentication mode for the wireless connection.

Passphrase Key It shows the passphrase key that is randomly generated by the wireless router during the WPS process. You may need this information when using a device which doesn't support WPS.

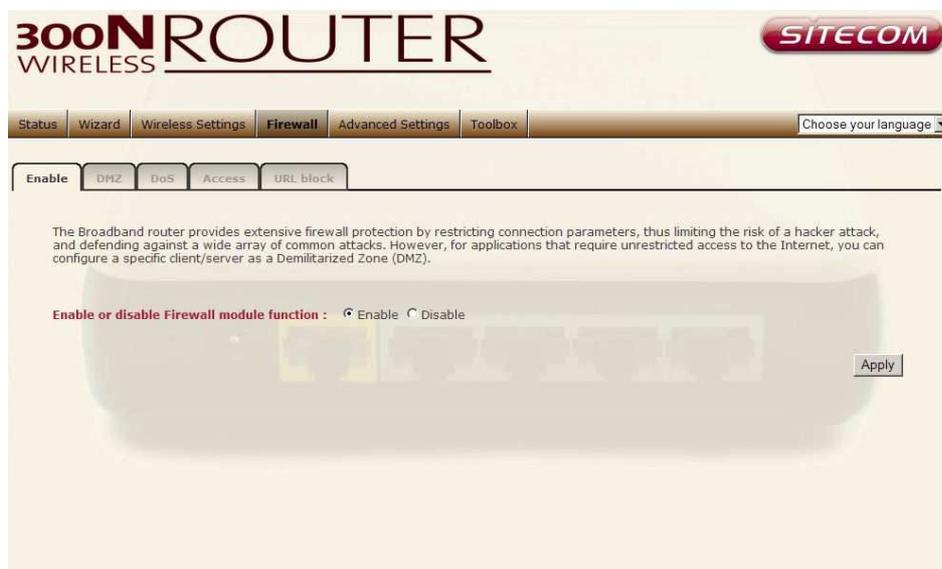
WPS via Push Button Press the button to start the WPS process. The router will wait for the WPS request from the wireless devices within 2 minutes.

WPS via PIN You can fill-in the PIN code of the wireless device and press the button to start the WPS process. The router will wait for the WPS request from the wireless device within 2 minutes.

12 Firewall Settings

The Broadband router provides extensive firewall protection by restricting connection parameters, thus limiting the risk of hacker attacks, and defending against a wide array of common Internet attacks. However, for applications that require unrestricted access to the Internet, you can configure a specific client/server as a Demilitarized Zone (DMZ).

Note: To enable the Firewall settings select Enable and click Apply



DMZ

If you have a client PC that cannot run an Internet application (e.g. Games) properly from behind the NAT firewall, then you can open up the firewall restrictions to unrestricted two-way Internet access by defining a DMZ Host. The DMZ function allows you to re-direct all packets going to your WAN port IP address to a particular IP address in your LAN. The difference between the virtual server and the DMZ function is that the virtual server re-directs a particular service/Internet application (e.g. FTP, websites) to a particular LAN client/server, whereas DMZ re-directs all packets (regardless of services) going to your WAN IP address to a particular LAN client/server.

300N WIRELESS ROUTER **SITECOM**

Status Wizard Wireless Settings **Firewall** Advanced Settings Toolbox Choose your language

Enable **DMZ** DoS Access URL block

If you have a local client PC that cannot run an Internet application properly from behind the NAT firewall, you can open unrestricted two-way Internet access for this client by defining a Virtual DMZ Host.

Enable DMZ

Public IP Address	Client PC IP Address
<input type="radio"/> Dynamic IP <input type="text" value="Session 1"/>	<input type="text"/>
<input type="radio"/> Static IP <input type="text"/>	<input type="text"/>

Add Reset

DMZ table:

NO.	Public IP Address	Client PC IP Address	Select
-----	-------------------	----------------------	--------

Delete Selected Delete All Reset

Apply Cancel

Enable DMZ Enable/disable DMZ

Public IP Address The IP address of the WAN port or any other Public IP addresses given to you by your ISP

Client PC IP Address Fill-in the IP address of a particular host in your LAN that will receive all the packets originally going to the WAN port/Public IP address above.

Click **<Apply>** at the bottom of the screen to save the above configurations.

Denial of Service (DoS)

The Broadband router's firewall can block common hacker attacks, including Denial of Service, Ping of Death, Port Scan and Sync Flood. If Internet attacks occur the router can log the events.



Ping of Death Protections from Ping of Death attack

Discard Ping From WAN The router's WAN port will not respond to any Ping requests

Port Scan Protects the router from Port Scans.

Sync Flood Protects the router from Sync Flood attack.

Access

You can restrict users from accessing certain Internet applications/services (e.g. Internet websites, email, FTP etc.), Access Control allows users to define the traffic type permitted in your LAN. You can control which PC client can have access to these services.

The screenshot shows the configuration page for the 300N WIRELESS ROUTER. The main navigation bar includes 'Status', 'Wizard', 'Wireless Settings', 'Firewall', 'Advanced Settings', and 'Toolbox'. The 'Firewall' section is active, and the 'Access' sub-tab is selected. The page contains the following elements:

- Enable MAC filtering:** A checkbox is unchecked. Radio buttons for 'Deny' (selected) and 'Allow' are present.
- Client PC MAC Address Table:** A table with two columns: 'Client PC MAC Address' and 'Comment'. It includes 'Add' and 'Reset' buttons.
- MAC Filtering table:** A table with four columns: 'NO.', 'Client PC MAC Address', 'Comment', and 'Select'. It includes 'Delete Selected', 'Delete All', and 'Reset' buttons.
- Enable IP Filtering Table (up to 20 computers):** A checkbox is unchecked. Radio buttons for 'Deny' (selected) and 'Allow' are present.
- IP Filtering Table:** A table with seven columns: 'NO.', 'PC Description', 'PC IP Address', 'Client Service', 'Protocol', 'Port range', and 'Select'. It includes 'Add', 'Delete Selected', and 'Delete All' buttons.
- Buttons:** 'Apply' and 'Cancel' buttons are located at the bottom right.

Deny If you select "Deny" then all clients will be allowed to access Internet accept for the clients in the list below.

Allow If you select "Allow" then all clients will be denied to access Internet accept for the PCs in the list below.

Filter client PCs by IP Fill in "IP Filtering Table" to filter PC clients by IP.

Add PC You can click Add PC to add an access control rule for users by IP addresses.

Remove PC If you want to remove some PCs from the "IP Filtering Table", select the PC you want to remove in the table and then click "Delete Selected". If you want to remove all PCs from the table, just click the "Delete All" button.

Filter client PC by MAC Check "Enable MAC Filtering" to enable MAC Filtering.

Add PC Fill in "Client PC MAC Address" and "Comment" of the PC that is allowed to access the Internet, and then click "Add". If you find any typo before adding it and want to retype again, just click "Reset" and the fields will be cleared.

Remove PC If you want to remove some PC from the "MAC Filtering Table", select the PC you want to remove in the table and then click "Delete Selected". If you want to remove all PCs from the table, just click the "Delete All" button. If you want to clear the selection and re-select again, just click "Reset".

Click <**Apply**> at the bottom of the screen to save the above configuration.

URL block

You can block access to some Web sites from particular PCs by entering a full URL address or just keywords of the Web site.

300N WIRELESS ROUTER SITECOM

Status Wizard Wireless Settings **Firewall** Advanced Settings Toolbox Choose your language

Enable DMZ DoS Access **URL block**

You can block access to certain Web sites for a particular PC by entering either a full URL address or just a keyword of the Web site

Enable URL Blocking

URL/keyword :

Add Reset

Current URL Blocking Table:

NO.	URL/keyword	Select
-----	-------------	--------

Delete Selected Delete All Reset

Apply Cancel

Enable URL Blocking Enable/disable URL Blocking

Add URL Keyword Fill in "URL/Keyword" and then click "Add". You can enter the full URL address or the keyword of the web site you want to block.

Remove URL Keyword If you want to remove some URL keywords from the "Current URL Blocking Table", select the URL keyword you want to remove in the table and then click "Delete Selected". If you want remove all URL keywords from the table, just click "Delete All" button. If you want to clear the selection and re-select again, just click "Reset".

Click <**Apply**> at the bottom of the screen to save the above configurations

13 Advanced Settings

Network Address Translation (NAT) allows multiple users at your local site to access the Internet through a single Public IP Address or multiple Public IP Addresses. NAT provides Firewall protection from hacker attacks and has the flexibility to allow you to map Private IP Addresses to Public IP Addresses for key services such as Websites and FTP. Select Disable to disable the NAT function.

Port Forwarding

Port Forwarding allows you to re-direct a particular range of service port numbers (from the Internet/WAN Port) to a particular LAN IP address. It helps you to host servers behind the router NAT firewall.



Enable Port Forwarding Enable Port Forwarding

Private IP This is the private IP of the server behind the NAT firewall.

Type This is the protocol type to be forwarded. You can choose to forward "TCP" or "UDP" packets only, or select "both" to forward both "TCP" and "UDP" packets.

Port Range The range of ports to be forward to the private IP.

Comment description of this setting.

Add Port Forwarding Fill in the "Private IP", "Type", "Port Range" and "Comment" of the setting to be added and then click "Add". Then this Port Forwarding setting will be added into the "Current Port Forwarding Table" below.

Remove Port Forwarding If you want to remove a Port Forwarding setting from the "Current Port Forwarding Table", select the Port Forwarding setting that you want to remove in the table and then click "Delete Selected". If you want to remove all Port Forwarding settings from the table, just click "Delete All" button. Click "Reset" will clear your current selections.

Virtual Server

Use the Virtual Server function when you want different servers/clients in your LAN to handle different service/Internet application type (e.g. Email, FTP, Web server etc.) from the Internet. Computers use numbers called port numbers to recognize a particular service/Internet application type. The Virtual Server allows you to re-direct a particular service port number (from the Internet/WAN Port) to a particular LAN private IP address and its service port number.

You can configure the router as a Virtual Server allowing remote users to access services such as Web or FTP at your local PC. Depending on the requested service (TCP/UDP) port number, the router will redirect the external service request to the appropriate internal server (located at one of your local PCs).

Enable Virtual Server

Local IP	Local Port	Type	Public Port	Comment
<input type="text"/>	<input type="text"/>	Both	<input type="text"/>	<input type="text"/>

Current Virtual Server Table:

NO.	Local IP	Local Port	Type	Public Port	Comment	Select
-----	----------	------------	------	-------------	---------	--------

Enable Virtual Server Enable Virtual Server.

Private IP This is the LAN client/host IP address that the Public Port number packet will be sent to.

Private Port This is the port number (of the above Private IP host) that the below **Public Port** number will be changed to when the packet enters your **LAN** (to the LAN Server/Client IP)

Type Select the port number protocol type (TCP, UDP or both). If you are unsure, then leave it to the default "both" setting. **Public Port** Enter the service (service/Internet application) port number from the Internet that will be re-directed to the above Private IP address host in your LAN

Comment The description of this setting.

Add Virtual Server Fill in the "Private IP", "Private Port", "Type", "Public Port" and "Comment" of the setting to be added and then click "Add". Then this Virtual Server setting will be added into the "Current Virtual Server Table" below.

Remove Virtual Server If you want to remove Virtual Server settings from the "Current Virtual Server Table", select the Virtual Server settings you want to remove in the table and then click "Delete Selected". If you want to remove all Virtual Server settings from the table, just click the "Delete All" button. Click "Reset" will clear your current selections.

Click **<Apply>** at the bottom of the screen to save the above configurations.

Special Applications

Some applications require multiple connections, such as Internet games, video Conferencing, Internet telephony and others. In this section you can configure the router to support multiple connections for these types of applications.

Enable Trigger Port Enable the Special Application function.

Trigger Port This is the out going (Outbound) range of port numbers for this particular application.

Trigger Type Select whether the outbound port protocol is "TCP", "UDP" or both.

Public Port Enter the In-coming (Inbound) port or port range for this type of application (e.g. 2300-2400, 47624)

300N ROUTER WIRELESS SITECOM

Status Wizard Wireless Settings Firewall **Advanced Settings** Toolbox Choose your language

NAT Enable Port forwarding Virtual Server **Special Applications** Application Layer Gateway uPNP Quality of Service

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications cannot work when Network Address Translation (NAT) is enabled. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the public ports associated with the trigger port to open them for inbound traffic.

Enable Trigger Port

Trigger port	Trigger type	Public Port	Public type	Comment
	Both		Both	

Popular applications : Select an application Add

Add Reset

Current Trigger-Port Table:

NO.	Trigger port	Trigger type	Public Port	Public type	Comment	Select
-----	--------------	--------------	-------------	-------------	---------	--------

Delete Selected Delete All Reset Apply Cancel

Public Type Select the Inbound port protocol type: "TCP", "UDP" or both

Comment The description of this setting.

Popular applications This section lists the more popular applications that require multiple connections. Select an application from the Popular

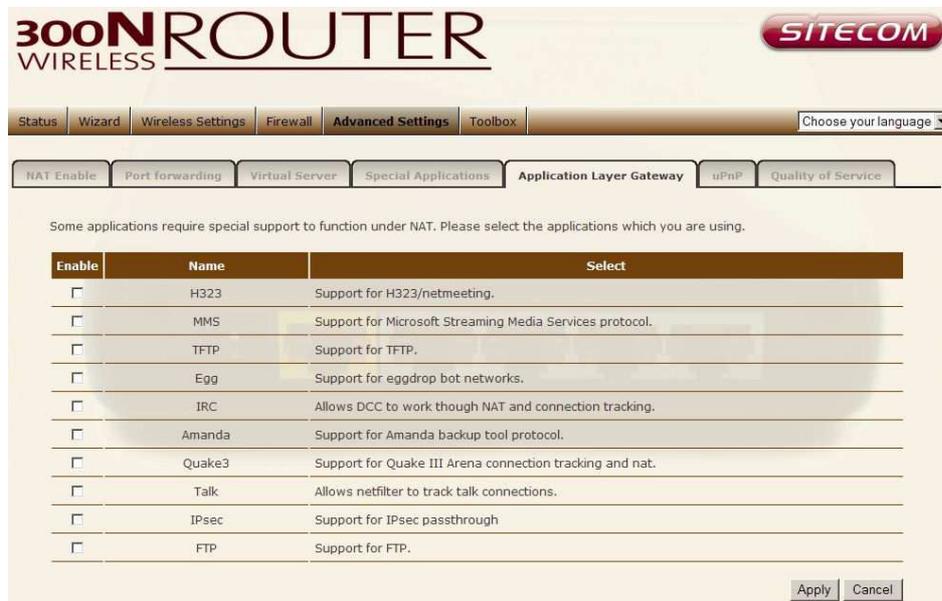
Applications selection. Once you have selected an application, select a location (1-10) in the Copy to selection box and then click the Copy to button. This will automatically list the Public Ports required for this popular application in the location (1-10) you specified.

Add Special Application Fill in the "Trigger Port", "Trigger Type", "Public Port", "Public Type", "Public Port" and "Comment" of the setting to be added and then click "Add". The Special Application setting will be added into the "Current Trigger-Port Table" below. If you happen to make a mistake, just click "Clear" and the fields will be cleared.

Remove If you want to remove Special Application settings from the "Current Trigger-Port Table", select the Special Application settings you want to remove in the table and then click "Delete Selected". If you want remove all Special Application settings from the table, just click the "Delete All" button. Click "Reset" will clear your current selections.

ALG

You can select applications that need "Application Layer Gateway" support.



300N WIRELESS ROUTER SITECOM

Status Wizard Wireless Settings Firewall **Advanced Settings** Toolbox Choose your language

NAT Enable Port forwarding Virtual Server Special Applications **Application Layer Gateway** uPnP Quality of Service

Some applications require special support to function under NAT. Please select the applications which you are using.

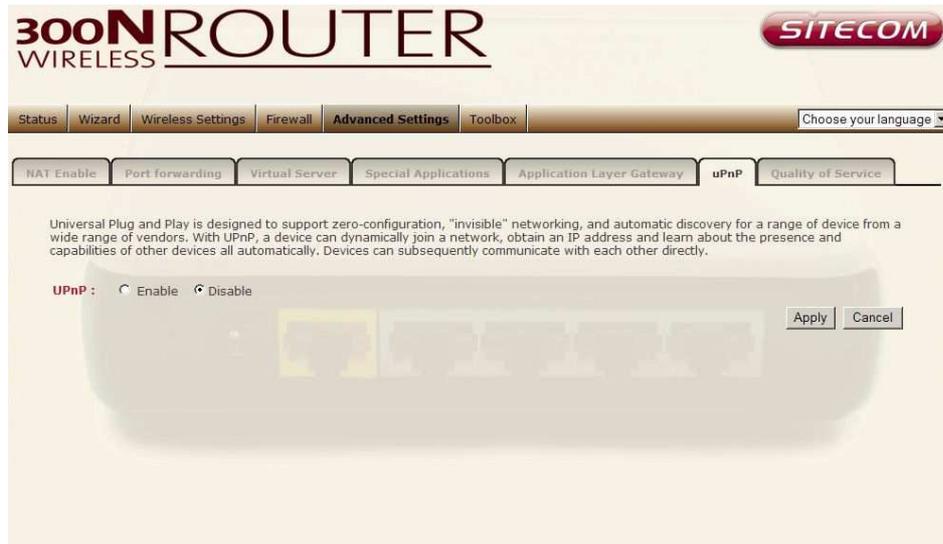
Enable	Name	Select
<input type="checkbox"/>	H323	Support for H323/netmeeting.
<input type="checkbox"/>	MMS	Support for Microsoft Streaming Media Services protocol.
<input type="checkbox"/>	TFTP	Support for TFTP.
<input type="checkbox"/>	Egg	Support for eggdrop bot networks.
<input type="checkbox"/>	IRC	Allows DCC to work though NAT and connection tracking.
<input type="checkbox"/>	Amanda	Support for Amanda backup tool protocol.
<input type="checkbox"/>	Quake3	Support for Quake III Arena connection tracking and nat.
<input type="checkbox"/>	Talk	Allows netfilter to track talk connections.
<input type="checkbox"/>	IPsec	Support for IPsec passthrough
<input type="checkbox"/>	FTP	Support for FTP.

Apply Cancel

Enable select enable "Application Layer Gateway", then the router will let the selected application correctly pass through the NAT gateway.

UPnP

With UPnP, all PCs in your Intranet will discover this router automatically, so you don't have to configure your PC and it can easily access the Internet through this router.



UPnP Feature You can enable or Disable the UPnP feature here. After you enable the UPnP feature, all client systems that support UPnP, like Windows XP, can discover this router automatically and access the Internet through this router without having to configure anything. The NAT Traversal function provided by UPnP can let applications that support UPnP connect to the internet without having to configure the virtual server sections.

QoS

QoS can let you classify Internet application traffic by source/destination IP address and port number. You can assign priority for each type of application and reserve bandwidth for it. The packets of applications with higher priority will always go first. Lower priority applications will get bandwidth after higher priority applications get enough bandwidth. This can let you have a better experience in using critical real time services like Internet phone, video conference ...etc. All the applications not specified by you are classified as rule name "Others". The rule with a smaller priority number has a higher priority; the rule with a larger priority number has a lower priority. You can adjust the priority of the rules by moving them up or down.

Quality of Service (QoS) refers to the capability of a network to provide better service to selected network traffic. The primary goal of QoS is to provide priority including dedicated bandwidth, controlled jitter and latency (required by some real-time and interactive traffic), and improved loss characteristics. Also important is making sure that providing priority for one or more flows does not make other flows fail.

Enable QoS

Current QoS Table :

Priority	Rule Name	Upload Bandwidth	Download Bandwidth	Select
----------	-----------	------------------	--------------------	--------

Enable/Disable QoS You can check "Enable QoS" to enable QoS functionality for the WAN port.

Add a QoS rule into the table Click "Add" then enter a form of the QoS rule. Click "Apply" after filling out the form the rule will be added into the table.

Remove QoS rules from the table If you want to remove QoS rules from the table, select the QoS rules you want to remove in the table and then click "Delete Selected". If you want remove all QoS rules from the table, just click the "Delete All" button. Clicking "Reset" will clear your current selections.

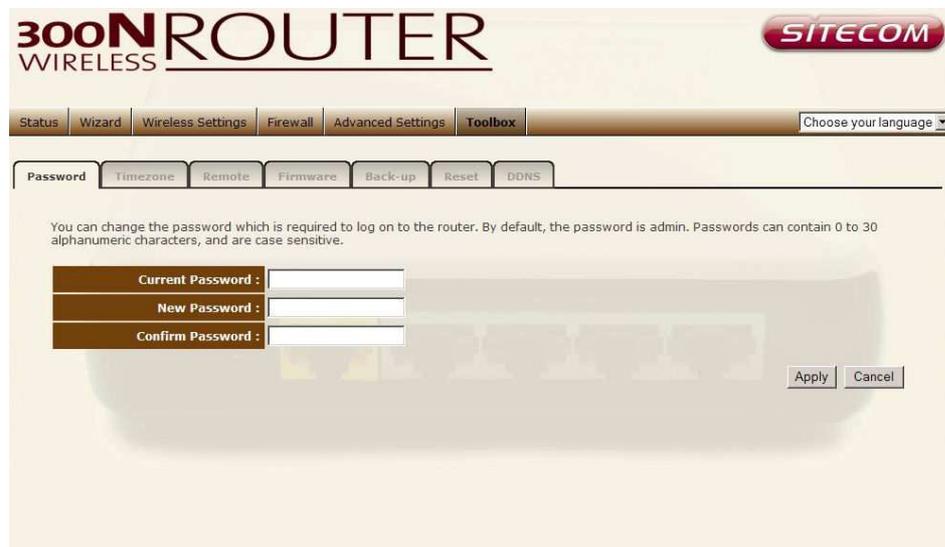
Edit a QoS rule Select the rule you want to edit and click "Edit", then enter the detail form of the QoS rule. Click "**Apply**" after editing the form and the rule will be saved.

Adjust QoS rule priority You can select the rule and click "Move Up" to make its priority higher. You also can select the rule and click "Move Down" to make its priority lower.

14 TOOLBOX Settings

Password change options

You can change the password required to log into the broadband router's system web-based management. By default, the password is: admin. Passwords can contain 0 to 12 alphanumeric characters, and are case sensitive.



The screenshot shows the web interface for a 300N WIRELESS ROUTER by SITECOM. The interface has a navigation bar with tabs for Status, Wizard, Wireless Settings, Firewall, Advanced Settings, and Toolbox. Below the navigation bar, there are sub-tabs for Password, Timezone, Remote, Firmware, Back-up, Reset, and DDNS. The Password tab is selected, and the page displays the following text: "You can change the password which is required to log on to the router. By default, the password is admin. Passwords can contain 0 to 30 alphanumeric characters, and are case sensitive." Below this text, there are three input fields labeled "Current Password :", "New Password :", and "Confirm Password :". To the right of these fields are "Apply" and "Cancel" buttons.

Current Password Fill in the current password to allow changing to a new password.

New Password Enter your new password.

Confirmed Password Enter your new password again for verification purposes.

Click <**Apply**> at the bottom of the screen to save the above configurations

Time Zone

The Time Zone allows your router to base its time on the settings configured here, which will affect functions such as Log entries and Firewall settings.

300N WIRELESS ROUTER SITECOM

Status Wizard Wireless Settings Firewall Advanced Settings Toolbox Choose your language

Password Timezone Remote Firmware Back-up Reset DDNS

Set the time zone of the Broadband router. This information is used for log entries and firewall settings.

Set Time Zone : (GMT)Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London

Time Server Address : europe.pool.ntp.org

Daylight Saving : Enable From January 1 To January 1

Apply Cancel

Set Time Zone Select the time zone of the country you are currently in. The router will set its time based on your selection.

Time Server Address You can set an NTP server address.

Enable Daylight Savings The router can also take Daylight savings into account. If you wish to use this function, you must check/tick the enable box to enable your daylight saving configuration (below).

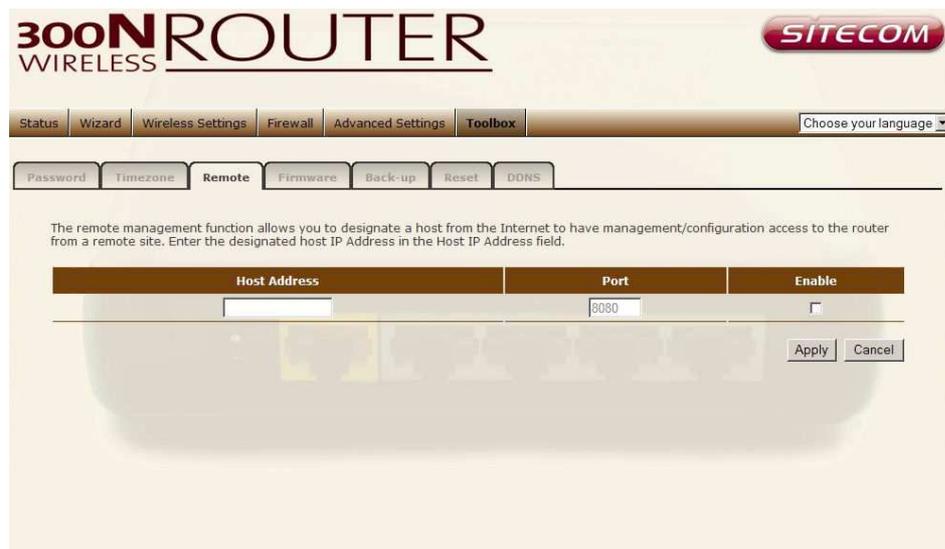
Start Daylight Savings Time Select the period in which you wish to start daylight Savings Time

End Daylight Savings Time Select the period in which you wish to end daylight Savings Time

Click <**Apply**> at the bottom of the screen to save the above configurations

Remote Management

The remote management function allows you to designate a host in the Internet the ability to configure the Broadband router from a remote site. Enter the designated host IP Address in the Host IP Address field.



The screenshot shows the configuration interface for a 300N WIRELESS ROUTER. The page title is "300N WIRELESS ROUTER" and the brand "SITECOM" is visible in the top right. The navigation menu includes "Status", "Wizard", "Wireless Settings", "Firewall", "Advanced Settings", and "Toolbox". The "Remote" tab is selected. Below the navigation menu, there are several sub-tabs: "Password", "Timezone", "Remote", "Firmware", "Back-up", "Reset", and "DNS". The "Remote" sub-tab is active. The main content area contains the following text: "The remote management function allows you to designate a host from the Internet to have management/configuration access to the router from a remote site. Enter the designated host IP Address in the Host IP Address field." Below this text is a table with three columns: "Host Address", "Port", and "Enable". The "Host Address" field is empty, the "Port" field contains "3080", and the "Enable" checkbox is checked. At the bottom right of the table, there are "Apply" and "Cancel" buttons.

Host Address	Port	Enable
	3080	<input checked="" type="checkbox"/>

Host Address This is the IP address of the host in the Internet that will have management/configuration access to the Broadband router from a remote site. If the Host Address is left 0.0.0.0 this means anyone can access the router's web-based configuration from a remote location, providing they know the password.

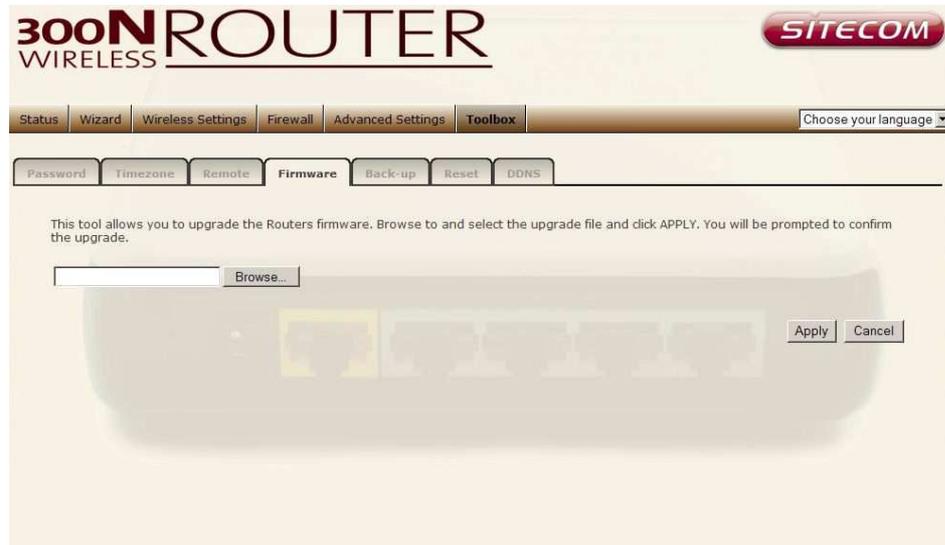
Port The port number of the remote management web interface.

Enabled Select "**Enabled**" to enable the remote management function.

Click <**Apply**> at the bottom of the screen to save the above configurations.

Firmware Upgrade

This page allows you to upgrade the router's firmware.

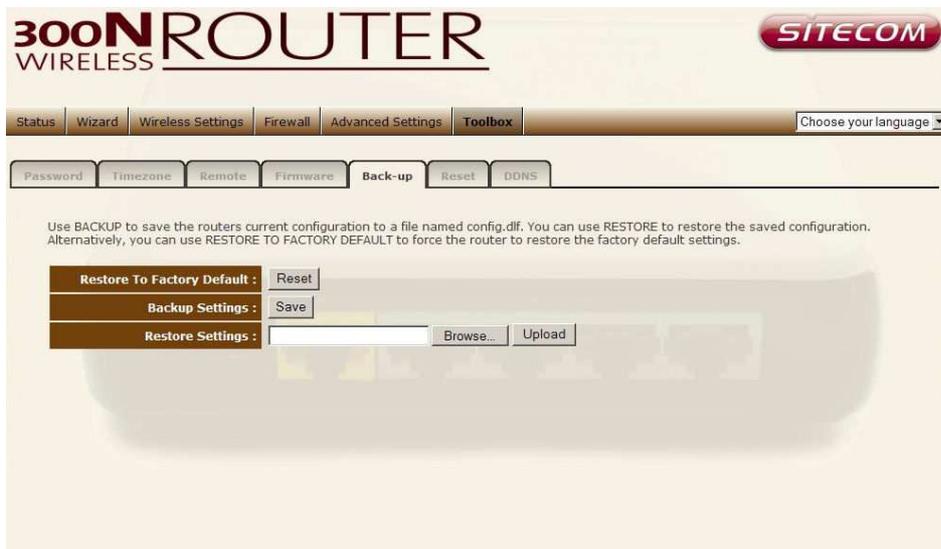


Firmware Upgrade This tool allows you to upgrade the Broadband router's system firmware. To upgrade the firmware of your Broadband router, you need to download the firmware file to your local hard disk, and enter that file name and path in the appropriate field on this page. You can also use the Browse button to find the firmware file on your PC.

Once you've selected the new firmware file, click <**Apply**> at the bottom of the screen to start the upgrade process

Backup Settings

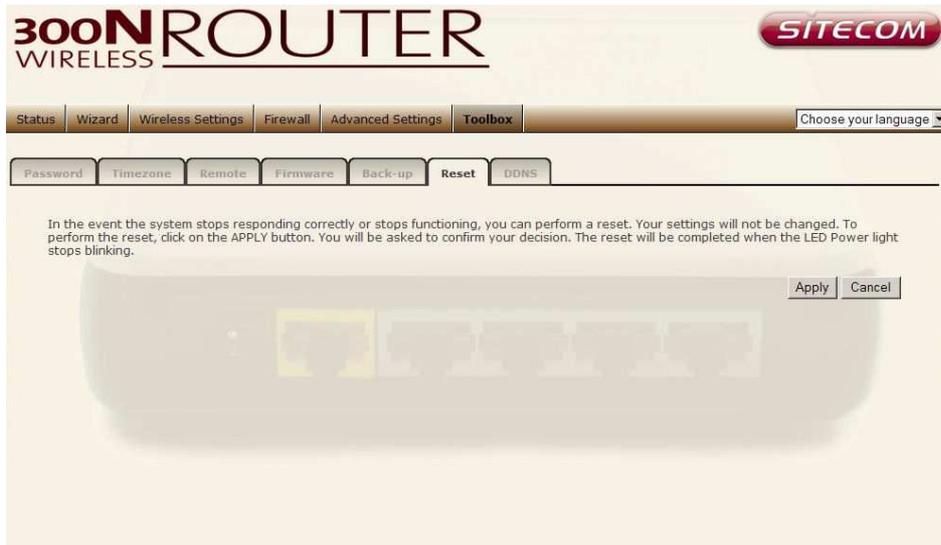
The Backup screen allows you to save (Backup) the router's current configuration settings. When you save the configuration setting (Backup) you can re-load the saved configuration into the router through the Restore selection. If extreme problems occur you can use the Restore to Factory Defaults selection, this will set all configurations to its original default settings (e.g. when you first purchased the router).



Use the "Backup" tool to save the Broadband router current configuration to a file named "**config.bin**" on your PC. You can then use the "Restore" tool to restore the saved configuration to the Broadband router. Alternatively, you can use the "Restore to Factory Defaults" tool to force the Broadband router to perform a power reset and restore the original factory settings.

Reset

You can reset the router's system should any problem exist. The reset function essentially re-boots your router's system.



DDNS

DDNS allows you to map the static domain name to a dynamic IP address. You must get an account, password and your static domain name from the DDNS service providers. This router supports DynDNS, TZO and other common DDNS service providers.

300N WIRELESS ROUTER SITECOM

Status Wizard Wireless Settings Firewall Advanced Settings Toolbox Choose your language

Password Timezone Remote Firmware Back-up Reset DDNS

DDNS allows users to map a static domain name to a dynamic IP address. You must get an account, password and your static domain name from the DDNS service provider..

Dynamic DNS : Enable Disable

Provider : 3322(qdns)

Domain Name :

Account/E-mail :

Password/Key :

Apply Cancel

Enable/Disable Enable or disable the DDNS function of this router

Provider Select a DDNS service provider

Domain name Fill in your static domain name that uses DDNS

Account/E-mail The account that your DDNS service provider assigned to you

Password/Key The password you set for the DDNS service account above

Click <**Apply**> at the bottom of the screen to save the above configurations.

Parts of the firmware of the WL-340/WL-341/WL-342 Wireless Broadband router are subject to the [GNU general public license](#).

Appendix A: Licensing Information

This product includes third-party software licensed under the terms of the [GNU General Public License](#). You can modify or redistribute this free software under the terms of the [GNU General Public License](#). Please see Appendix B for the exact terms and conditions of this license.

Specifically, the following part of this product is subject to the GNU GPL:

#	Package name	Source
1	Linux v2.6.21	www.kernel.org
2	Iptables v1.3.5	www.netfilter.org/
3	Bridge-utils v1.2	bridge.sourceforge.net/
4	Busybox v1.7.5	www.busybox.net/
5	Rp-pppoe v3.8	freshmeat.net/projects/rp-pppoe/
6	Pptp-client v1.7.1	pptpclient.sourceforge.net/
7	Ppp v2.4.3	ppp.samba.org/
8	Udhcp v0.9.9-pre	udhcp.busybox.net/
9	iproute2 v2.6.16-060323	www.linux-foundation.org/en/Net:Iproute2
10	Dnsmasq v2.39	www.thekelleys.org.uk/dnsmasq/doc.html
11	Ez-ipupdate v3.0.11b8	ez-ipupdate.com/
12	Libupnp v1.6.0	upnp.sourceforge.net/
13	Wireless-tools v28	RaLink SDK 3.1.0.0
14	U-boot v1.1.3	RaLink SDK 3.1.0.0
15	gcc-3.3.6	RaLink SDK 3.1.0.0
16	Uclibc-0.9.29	RaLink SDK 3.1.0.0

Availability of source code

Sitecom Europe BV has made available the full source code of the GPL licensed software, including any scripts to control the compilation and installation of the object code [in the driver section of this product](#).

No Warranty

The free software included in this product is distributed in the hope that it will be useful, but WITHOUT ANY LIABILITY OF OR ANY WARRANTY FROM THE LICENSOR.

Appendix B: GNU GENERAL PUBLIC LICENSE

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