Wi-Fi router X7 AC1200

WLR-7100

User Manual

Table of Contents

Revision 1.1

Note: All the information contained in this manual was correct at the time of publication.

However, as our engineers are always updating and improving the product, your device's software may have a slightly different appearance or modified functionality than presented in this manual.

Introduction

Congratulations on your purchase of the WiFi Router X7 AC1200. This router is compliant with 802.11a/b/g/n/ac and up to 3 times faster than standard 802.11n based routers while still being compatible with 802.11g & 802.11b devices. This router is not only a Wireless Access Point, but also doubles as a 4-port full-duplex Gigabit switch that connects your wired-Ethernet devices together at 10/100/1000 Mbps speeds.

At 300Mbps wireless transmission rate on 2.4GHz and 866 Mbps wireless transmission rate on 5GHz, 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. The robust RF signal travels farther, eliminates dead spots and extends the network range. For data protection and privacy, the router encodes all wireless transmissions with WEP, WPA, or WPA2 encryption.

With the built-in DHCP Server & powerful SPI firewall, the router protects your computers against intruders and most known Internet attacks and also provides safe VPN pass-through. With the incredible speed and QoS function of 802.11n, the router 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.

With Sitecom Cloud Security, Sitecom goes one step further and ensures that you can surf the Internet even more safely, not only on your PC, but on all the devices in your home which you use to access the Internet. It does not matter whether you surf the Internet on a laptop, a tablet, a mobile telephone or your television. Thanks to the security that is integrated in the router, all the Internet devices in your home are protected against the dangers of Internet criminality.

Key Features

Features	Advantages
Incredible Data Rate up to 866Mbps*	Heavy data payloads such as MPEG video streaming
IEEE 802.11n Compliant and backwards compatible with 802.11b/g/n	Fully Interoperable with IEEE 802.11b / IEEE802.11g, IEEE 802.11n compliant devices with legacy protection
Four 10/100/1000 Mbps gigabit 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
Sitecom Cloud Security	Protect your home against cybercrime while browsing.
USB Port	Connect any USB device and share it in your network.
Guest Network	Devices connected to the Guest network will have Internet connection but no access to the main network and cannot communicate with each other.
IPv6 support	Support for Static, Native, 6RD and DS-Lite.

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

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.

- The WLR-7100 WiFi Router X7 AC1200
- A 110V~240V to 12V 1.25A Switching Power Adapter
- A Quick Install Guide
- A CD-ROM with software
- An UTP cable

Cautions

This router's design and manufacturer has your safety in mind. In order to safely and effectively use this router, please read the following before usage.

Usage Cautions

The user should not modify this router. The environmental temperature should be within +5 ~ +35 degrees Celsius.

Power

The router's power voltage is DC 12V 1.25A.

When using this router, please connect the supplied AC adapter or AC adapter cable to the router's power jack. When placing the adapter cable, make sure it can't get damaged or be subject to pressure. To reduce the risk of electric shock, unplug the adapter first before cleaning it. Never connect the adapter to the router in a humid or dusty area. Do not replace the adapter or cable's wire or connector.

Repair

If the router has a problem, you should take it to an appointed repair center and let the specialists do the repair. Never repair the router yourself, you might damage the router or endanger yourself.

Disposing of the Router

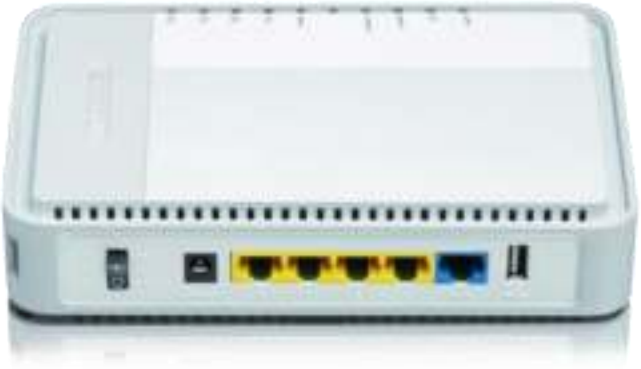
When you dispose of the router, be sure to dispose it appropriately. Some countries may regulate disposal of an electrical device, please consult with your local authority.

Others

When using this router, please do not let it come into contact with water or other liquids. If water is accidentally spilled on the router, please use a dry cloth to absorb the spillage. Electronic products are vulnerable, when using please avoid shaking or hitting the router, and do not press the buttons too hard.

- Do not let the router come into contact with water or other liquid.
- Do not disassemble, repair or change the design of the router; any damage done will not be included in the repair policy.
- Avoid hitting the router with a hard object, avoid shaking the router and stay away from magnetic fields.
- If during electrostatic discharge or a strong electromagnetic field the product will malfunction, unplug the power cable. The product will return to normal performance the next time it is powered on.

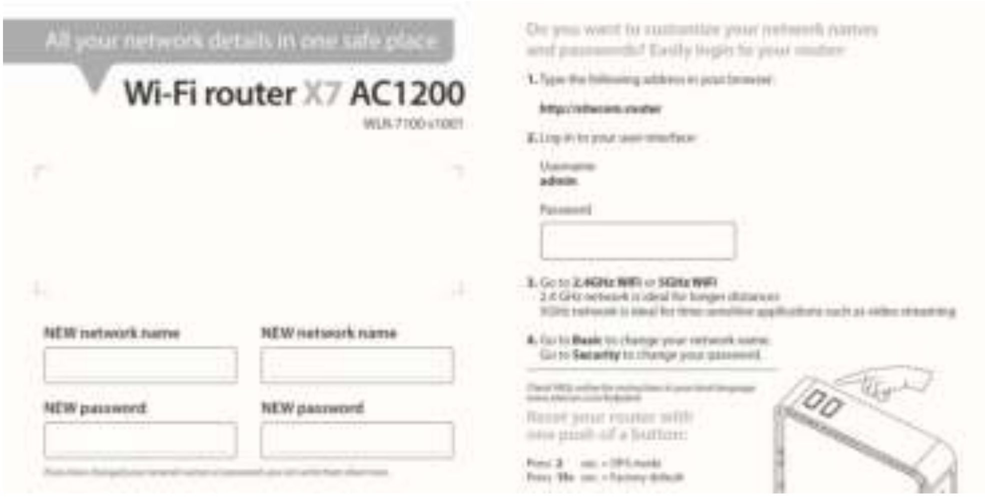
Product Layout



Port	Description
Power connector	Connect the 12V DC adapter to this port
LAN (Yellow)	Connect your PCs or network devices to these ports
WAN (Blue)	Connect your ADSL/Cable modem to this port
USB Port	Connect a USB device to this port

Backlabel and Network Details Folder

The Network Details Folder describes the IP address, login details, network name, security code and OPS button functionality.



All your network details in one safe place

Wi-Fi router X7 AC1200

WLR-7100 v1001

NEW network name

NEW network name

NEW password

NEW password

[illegible]

Do you want to customize your network names and passwords? Easily login to your router:

1. Type the following address in your browser:

   http://sitecom.router

2. Log in to your user interface:

   Username
   admin

   Password

3. Go to 2.4GHz WiFi or 5GHz WiFi
   2.4 GHz network is ideal for longer distances
   5GHz network is ideal for time-sensitive applications such as video streaming

4. Go to Basic to change your network name.
   Go to Security to change your password.

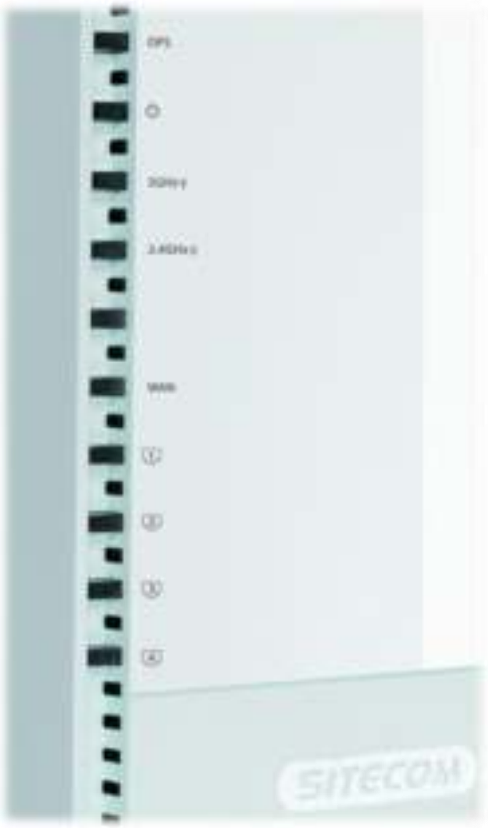
[illegible]

Reset your router with one push of a button:

Press 2 sec. = OPS mode
Press 15s sec. = Factory default

Button	Description
OPS BUTTON	Press 2 seconds for WPS/OPS mode
	Press both buttons 15+ Seconds to reset to factory defaults.

LED Definition



As shown from the top to the bottom.

Port	Description
OPS (White)	Shows OPS activity.
Power (Red)	Shows the device is turned on.
5GHz WiFi (Blue)	Shows 5GHz WiFi activity.
2.4GHz WiFi (Blue)	Shows 2.4GHz WiFi activity.
WAN (Blue)	Shows the WAN cable is connected.
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.

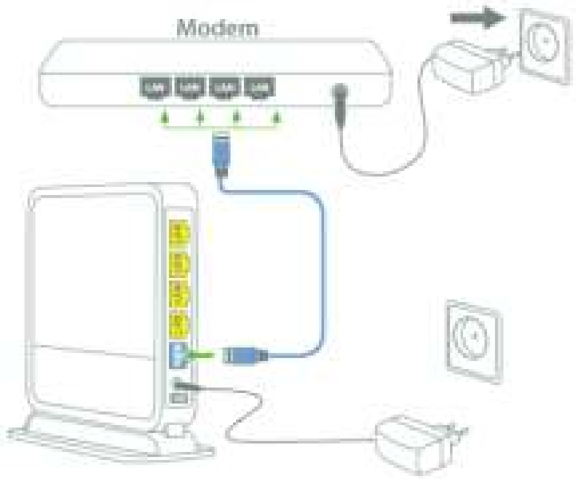
Network + System Requirements

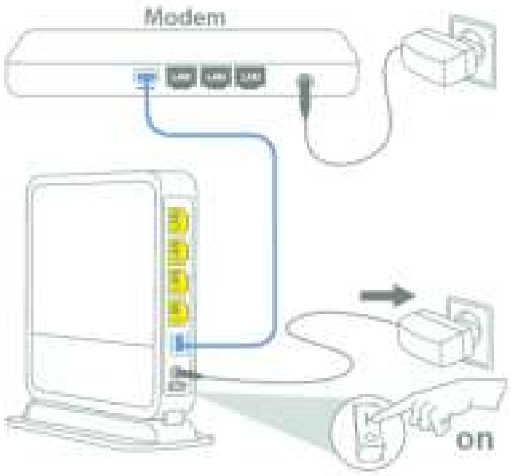
To begin using the router, make sure you meet the following as minimum requirements:

- PC/Notebook.
- Operating System – Microsoft Windows XP/VISTA/7 or Mac OSX
- 1 Free Ethernet port.
- WiFi card/USB dongle (802.11 a/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 CAT5e cables.

Setup your Router

You can place the router on a desk or other flat surface, or you can mount it on a wall. For optimal performance, place your router in the center of your home (or your office) 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.



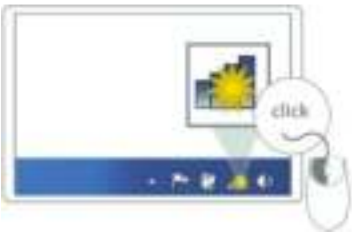


Connect the supplied power-adapter to the power inlet port and connect it to a wall outlet. Switch the router on by flipping the switch on the back of the device. The router automatically enters the self-test phase. During self-test phase, the Power LED will be lit continuously to indicate that this product is in normal operation.

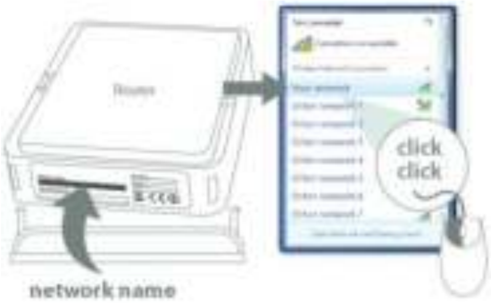
Setup your Computer

Windows, Manual Connection

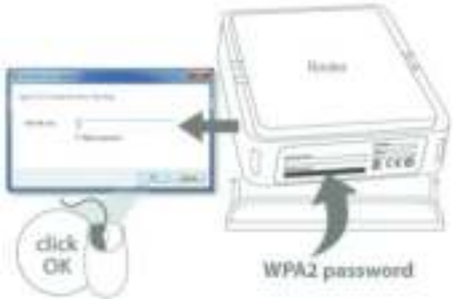
- Click on the icon for wireless connectivity. This is usually located in the System Tray, next to the clock.



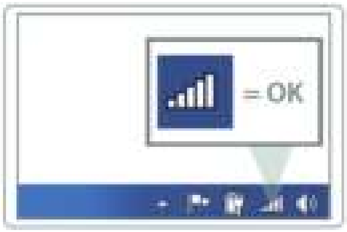
- Select the Sitecom network. The correct network name can be found on the sticker on bottom of the router, or in the Network Details Folder.



- Fill in the password for the wireless network. The correct password can be found on the sticker on the bottom of the router, or in the Network Details Folder.



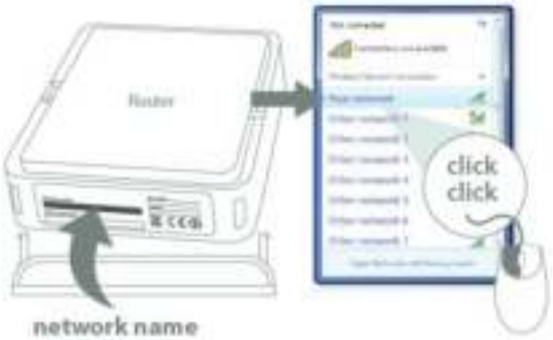
- Wait for the icon to display that it’s connected to the network.



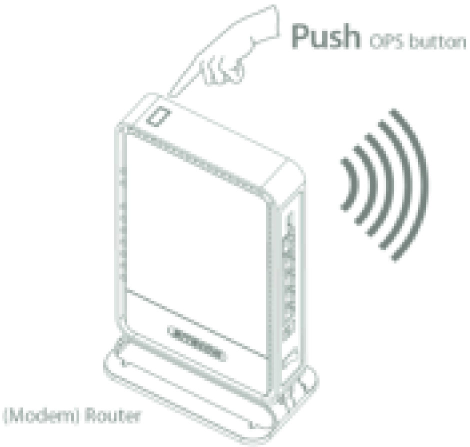
Windows, OPS Connection

- Click on the icon for wireless connectivity. This is usually located in the System Tray, next to the clock.

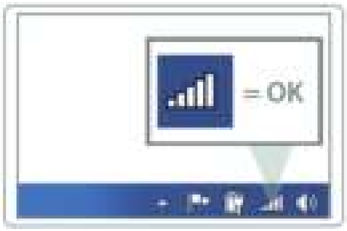
- Select the Sitecom network. The correct network name can be found on the sticker on bottom of the router, or in the Network Details Folder.



- Push the OPS Button on the router. For 2.4GHz, press 0-5 seconds. For 5GHz, press 5-10 seconds.



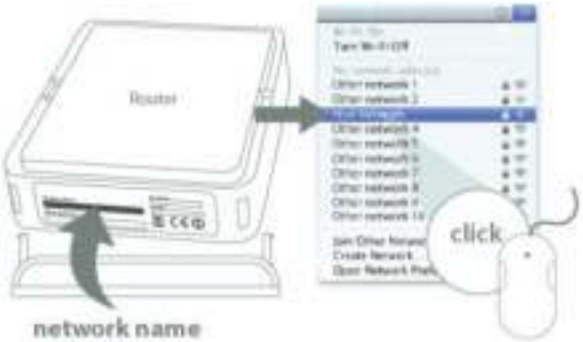
- Wait for the icon to display that it’s connected to the network.



Mac OSX

- Click on the icon for wireless connectivity. This is usually located in the System Tray, next to the clock.

- Select the Sitecom network. The correct network name can be found on the sticker on bottom of the router, or in the Network Details Folder.



- Fill in the password for the wireless network. The correct password can be found on the sticker on the bottom of the router, or in the Network Details Folder.

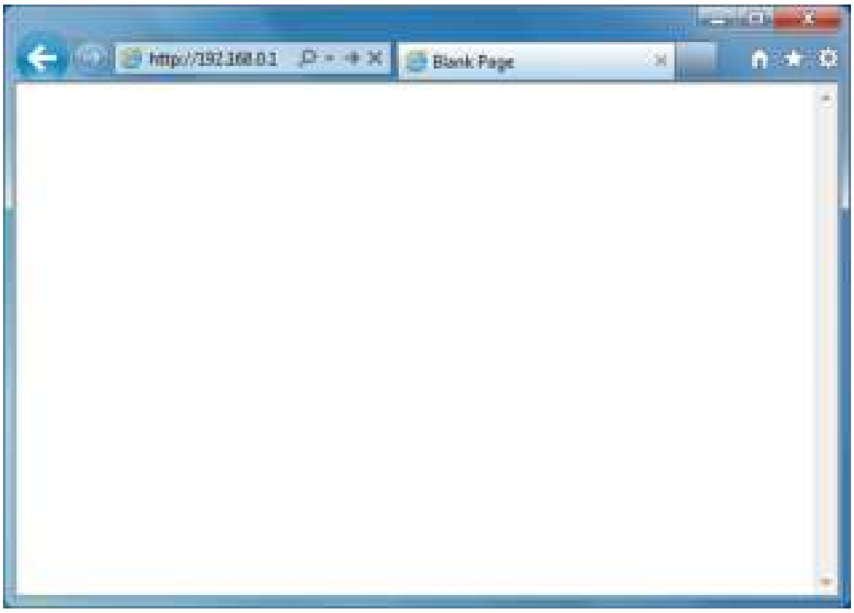
Router
click
Join
WPA2 password

- Wait for the icon to display that it's connected to the network.

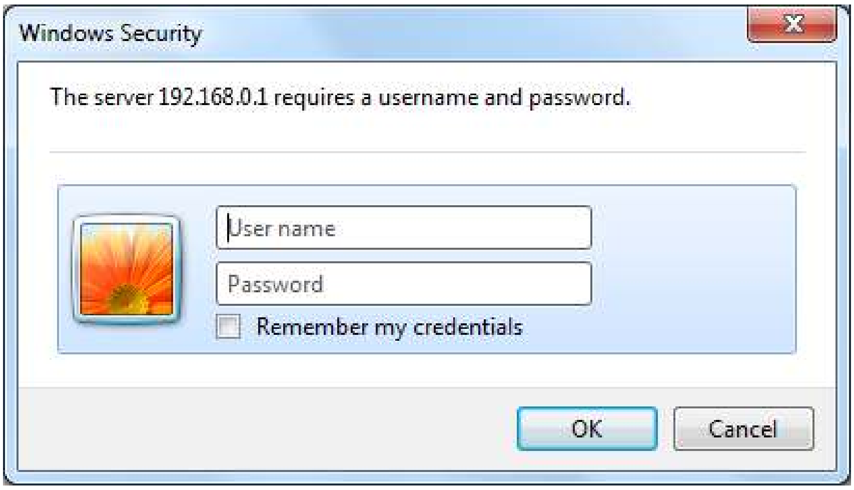
Login to your Router

LOGIN procedure

- OPEN your browser (e.g. Internet Explorer).
- Type http://sitecom.router in the address bar and press [Enter].



- Type user name and password. The default username is admin, the password can be found on the back label on the bottom of your router.

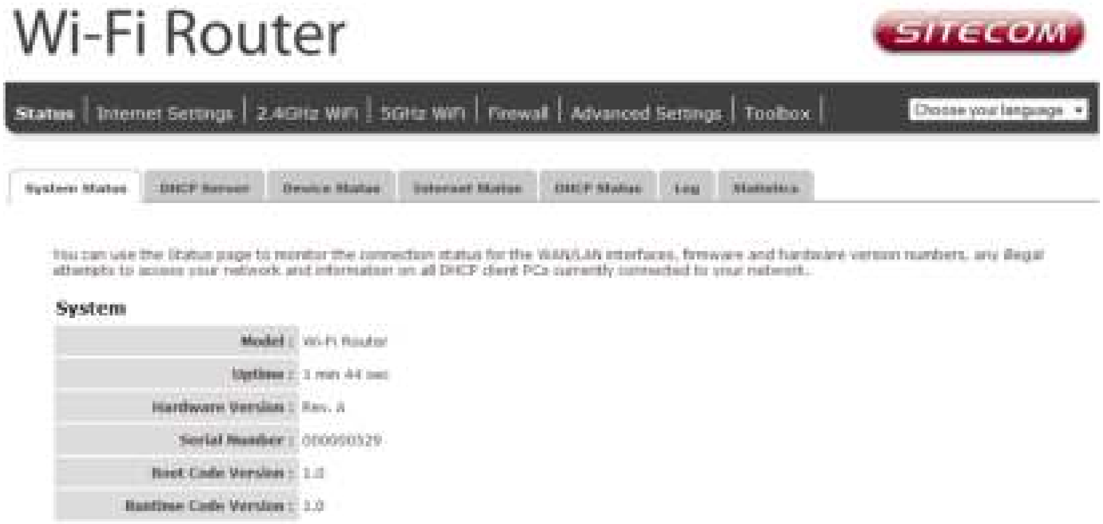

Windows Security

The server 192.168.0.1 requires a username and password.

- Click OK.
- You will see the home page of the WiFi Router X7 AC1200.

Configure your Internet connection

From the menu, select “Internet Settings”.

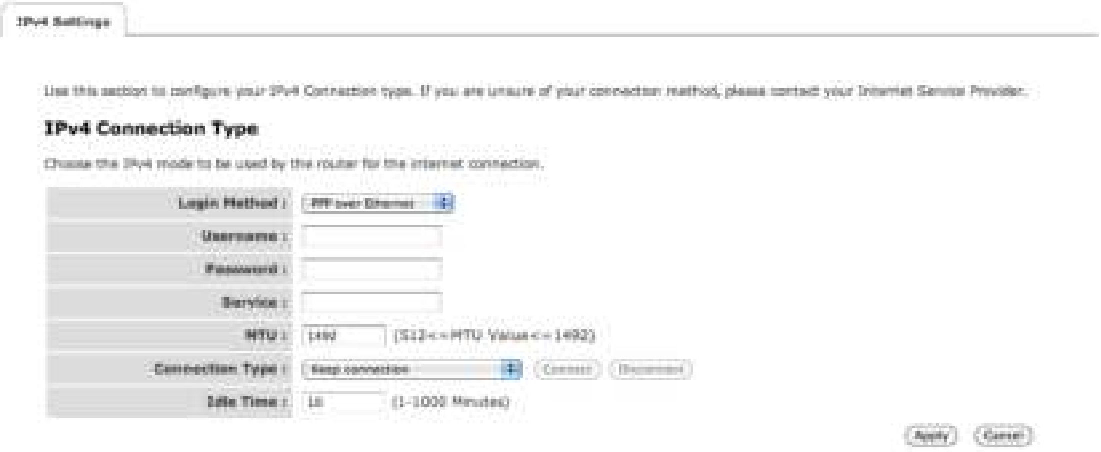


You can use the Status page to monitor the connection status for the WAN/LAN interfaces, firmware and hardware version numbers, any illegal attempts to access your network and information on all DHCP client PCs currently connected to your network.

System

Model :	Wi-Fi Router
Uptime :	1 min 44 sec
Hardware Version :	Rev. A
Serial Number :	000000329
Boot Code Version :	1.0
Runtime Code Version :	1.0

Depending on the chosen setting, 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 **Apply**.



Use this section to configure your IPv4 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

IPv4 Connection Type

Choose the IPv4 mode to be used by the router for the internet connection.

Login Method :	PPP over Ethernet
Username :	
Password :	
Service :	
MTU :	1492 (512<=MTU Value<=1492)
Connection Type :	Keep connection
Idle Time :	10 (1-1000 Minutes)

IPv6 Configuration

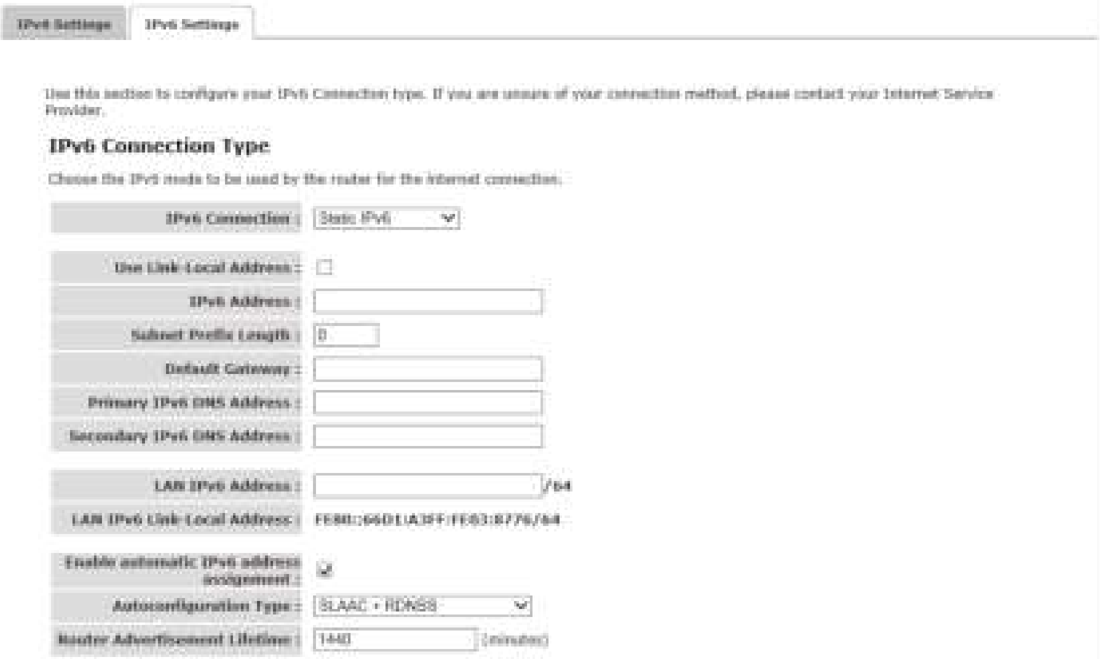
The IPv6 (Internet Protocol version 6) section is where you configure your IPv6 Connection type.

IPv6 Connection Type

There are several connection types to choose from: Static IPv6, Autoconfiguration, 6RD and Link-local only. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Static IPv6 Mode

This mode is used when your ISP provides you with a set IPv6 addresses that does not change. The IPv6 information is manually entered in your IPv6 configuration settings. You must enter the IPv6 address, Subnet Prefix Length, Default Gateway, Primary DNS Server and Secondary DNS Server. Your ISP provides you with all this information.



Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

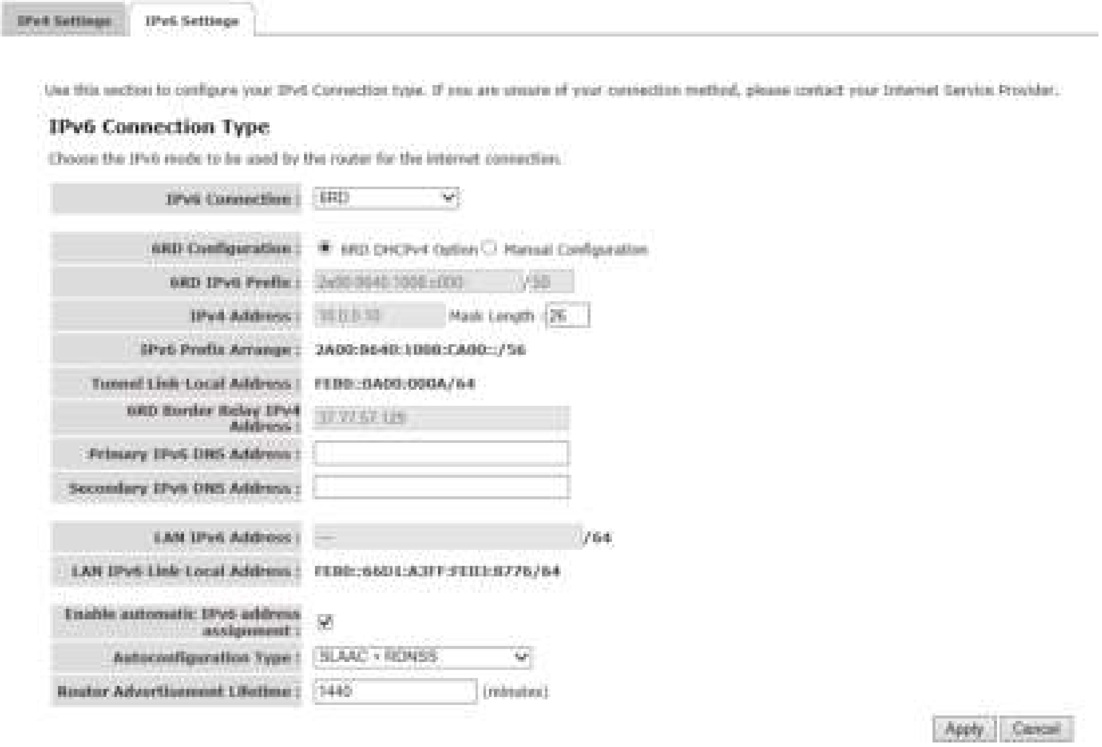
IPv6 Connection Type

Choose the IPv6 mode to be used by the router for the internet connection.

IPv6 Connection :	Static IPv6
Use Link-Local Address :	□
IPv6 Address :	
Subnet Prefix Length :	0
Default Gateway :	
Primary IPv6 DNS Address :	
Secondary IPv6 DNS Address :	
LAN IPv6 Address :	/64
LAN IPv6 Link-Local Address :	FE80::66D1:A3FF:FE63:8776/64
Enable automatic IPv6 address assignment :	☑
Autoconfiguration Type :	SLAAC + RDNSS
Router Advertisement Lifetime :	1440 (minutes)

6RD Mode

In the 6RD mode, no additional configuration is necessary.



Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

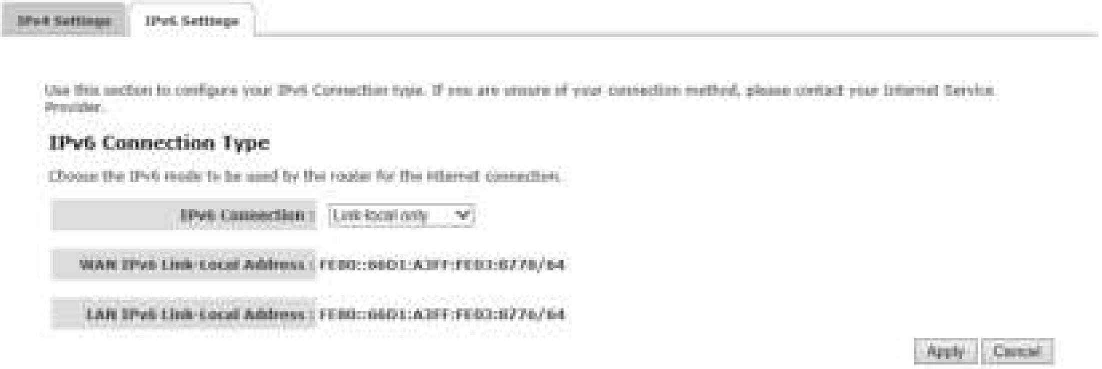
IPv6 Connection Type

Choose the IPv6 mode to be used by the router for the internet connection.

IPv6 Connection :	6RD
6RD Configuration :	● 6RD DHCPv4 Option ○ Manual Configuration
6RD IPv6 Prefix :	2a00:0640:1000::000 /50
IPv4 Address :	10.0.0.10 Mask Length 26
IPv6 Prefix Arrange :	2A00:0640:1000:CA00::/56
Tunnel Link-Local Address :	FE80::0A00:000A/64
6RD Border Relay IPv4 Address :	37.77.57.125
Primary IPv6 DNS Address :	
Secondary IPv6 DNS Address :	
LAN IPv6 Address :	--- /64
LAN IPv6 Link-Local Address :	FE80::66D1:A3FF:FE03:8776/64
Enable automatic IPv6 address assignment :	☑
Autoconfiguration Type :	SLAAC + RDNSS
Router Advertisement Lifetime :	1440 (minutes)

Link-local Mode

The Link-local address is used by nodes and routers when communicating with neighboring nodes on the same link. This mode enables IPv6-capable devices to communicate with each other on the LAN side.



Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

IPv6 Connection Type

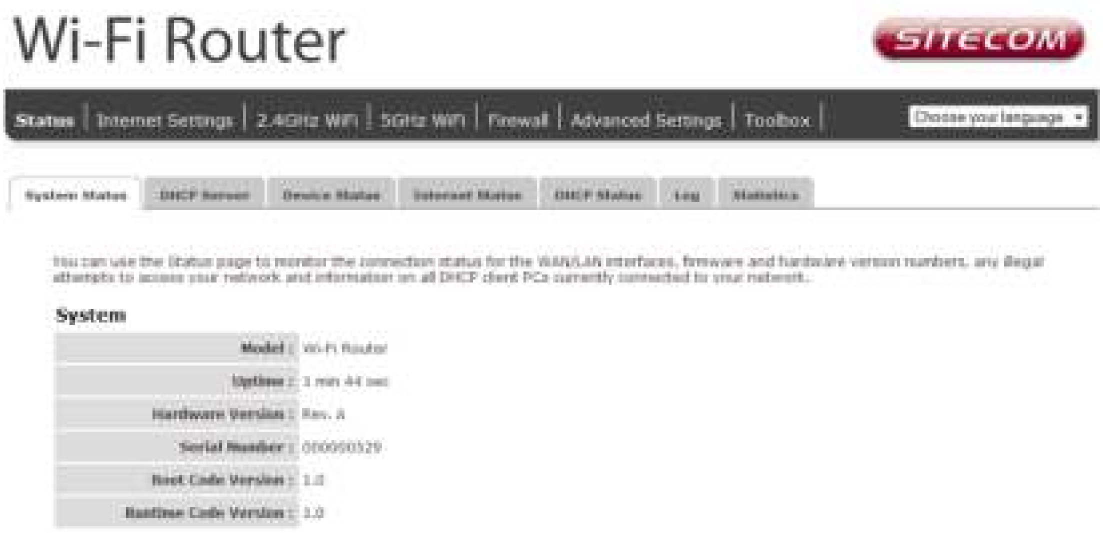
Choose the IPv6 mode to be used by the router for the internet connection.

IPv6 Connection :	Link-local only
WAN IPv6 Link-Local Address :	FE80::66D1:A3FF:FE03:8778/64
LAN IPv6 Link-Local Address :	FE80::66D1:A3FF:FE03:8776/64

Configure your Router

Status

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



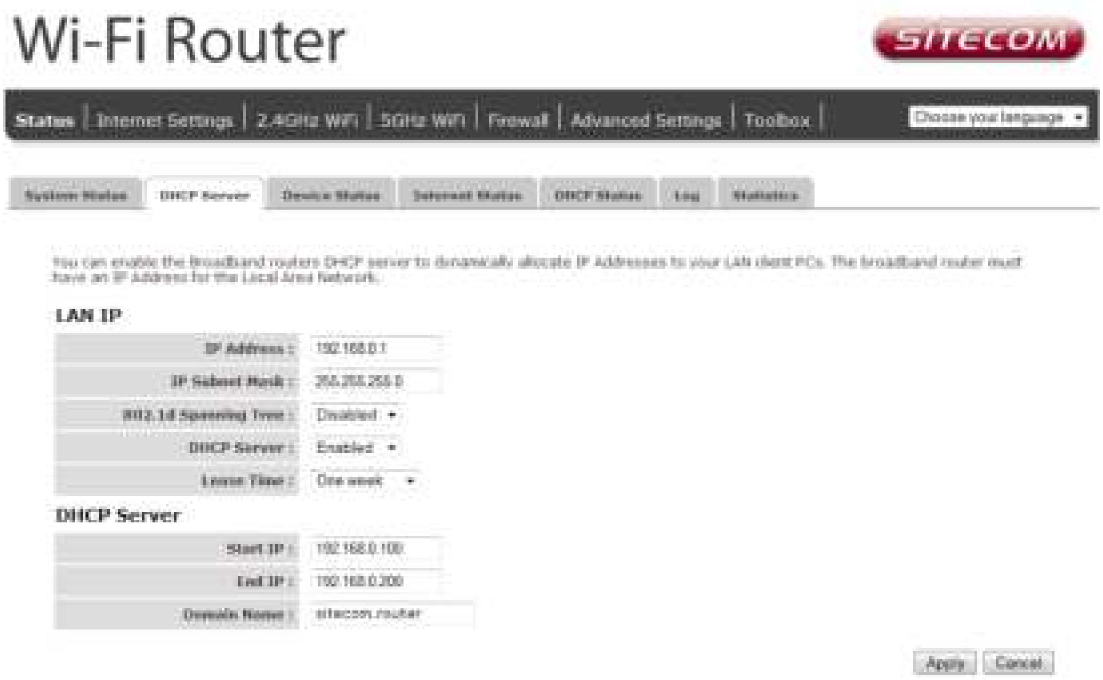
You can use the Status page to monitor the connection status for the WAN/LAN interfaces, firmware and hardware version numbers, any illegal attempts to access your network and information on all DHCP client PCs currently connected to your network.

System

Model :	Wi-Fi Router
Uptime :	1 min 44 sec
Hardware Version :	Rev. A
Serial Number :	000050529
Boot Code Version :	1.0
Runtime Code Version :	1.0

DHCP Server

The DHCP Server tab gives you the opportunity to change the IP settings of the router.



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 :	One week

DHCP Server

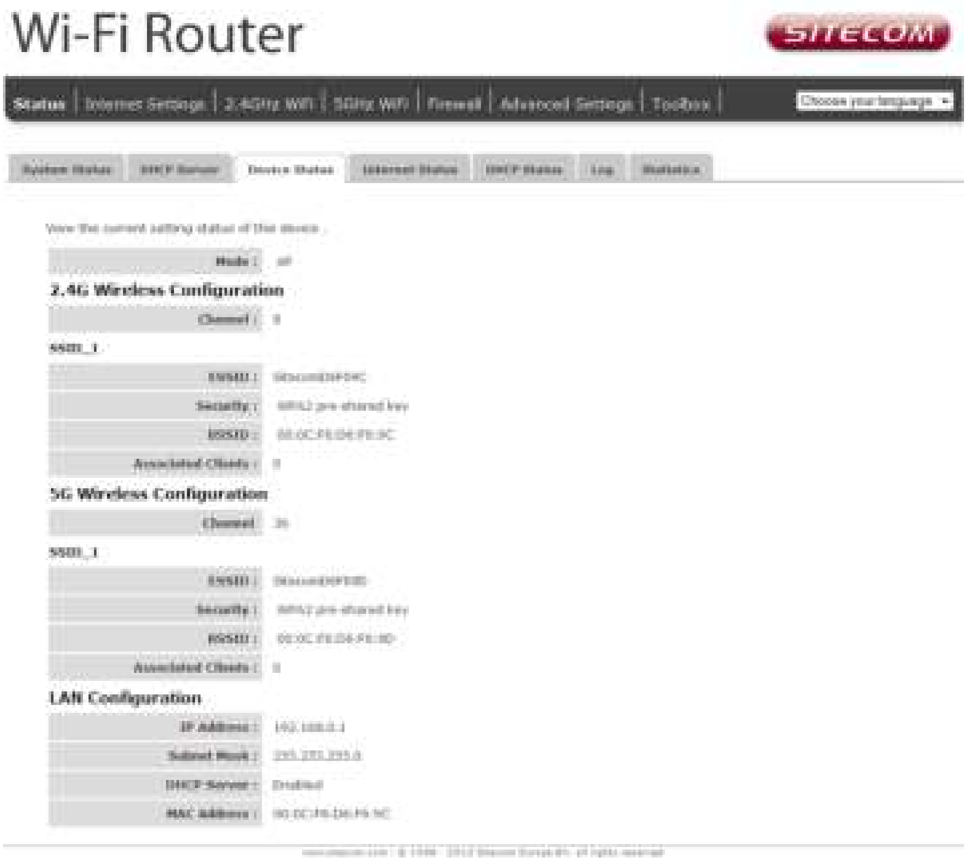
Start IP :	192.168.0.100
End IP :	192.168.0.200
Domain Name :	sitecom.router

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**: 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**: One Week. 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. The default IP range is 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 (sitecom.router).

Device Status

View the router's current configuration settings. Device Status displays the configuration settings you've configured in the Internet Settings and WiFi Settings sections.



View the current setting status of this device .

Mode :	AP

2.4G Wireless Configuration

Channel :	6

SSID_1

ESSID :	SitecomD6F69C
Security :	WPA2 pre-shared key
BSSID :	00:0C:F6:D6:F6:9C
Associated Clients :	0

5G Wireless Configuration

Channel	36

SSID_1

ESSID :	SitecomD6F69D
Security :	WPA2 pre-shared key
BSSID :	00:0C:F6:D6:F6:9D
Associated Clients :	0

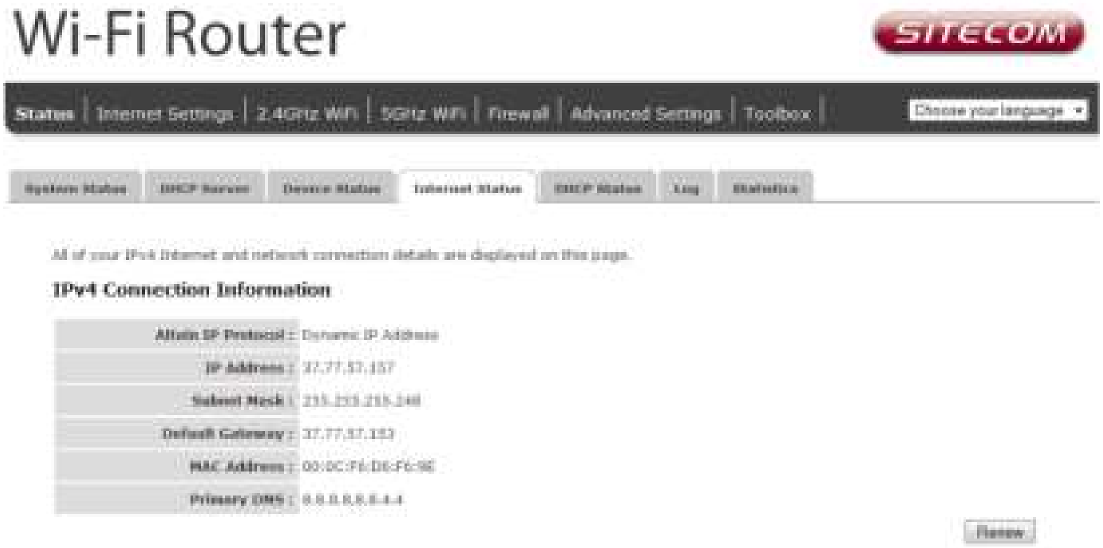
LAN Configuration

IP Address :	192.168.0.1
Subnet Mask :	255.255.255.0
DHCP Server :	Enabled
MAC Address :	00:0C:F6:D6:F6:9C

www.sitecom.com | © 1996 - 2013 Sitecom Europe BV, all rights reserved

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.



All of your IPv4 Internet and network connection details are displayed on this page.

IPv4 Connection Information

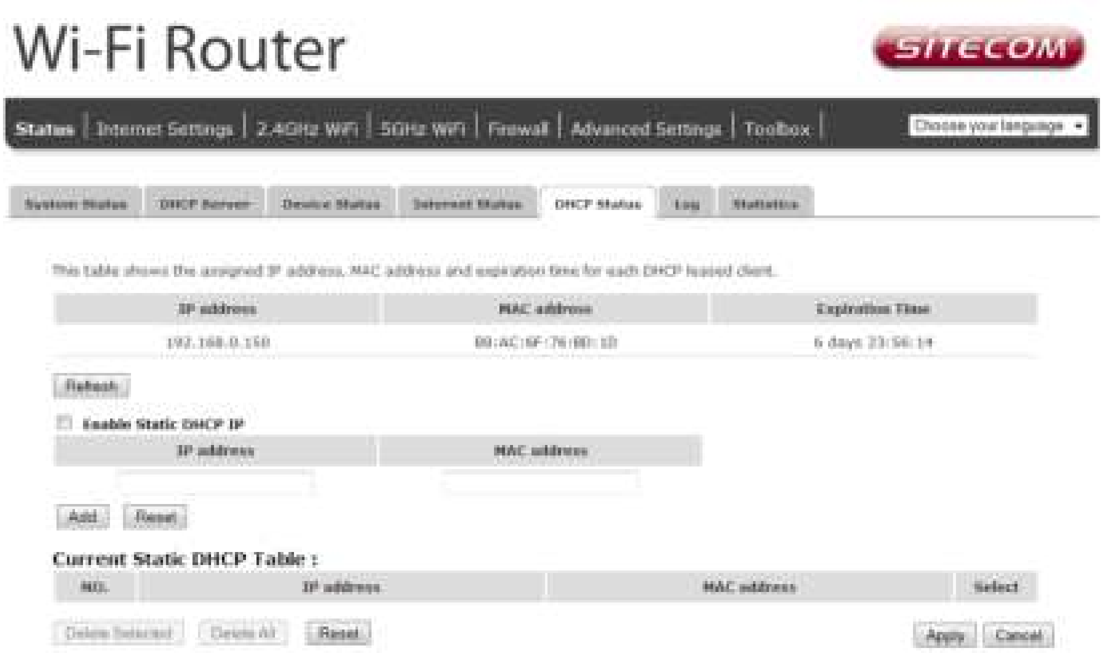
Attain IP Protocol :	Dynamic IP Address
IP Address :	37.77.57.157
Subnet Mask :	255.255.255.248
Default Gateway :	37.77.57.153
MAC Address :	00:0C:F6:D6:F6:9E
Primary DNS :	8.8.8.8,8.8.4.4

DHCP Client Status

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** to save the changed configuration.



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

IP address	MAC address	Expiration Time
192.168.0.150	00:AC:6F:76:80:1D	6 days 23:56:14

□ Enable Static DHCP IP

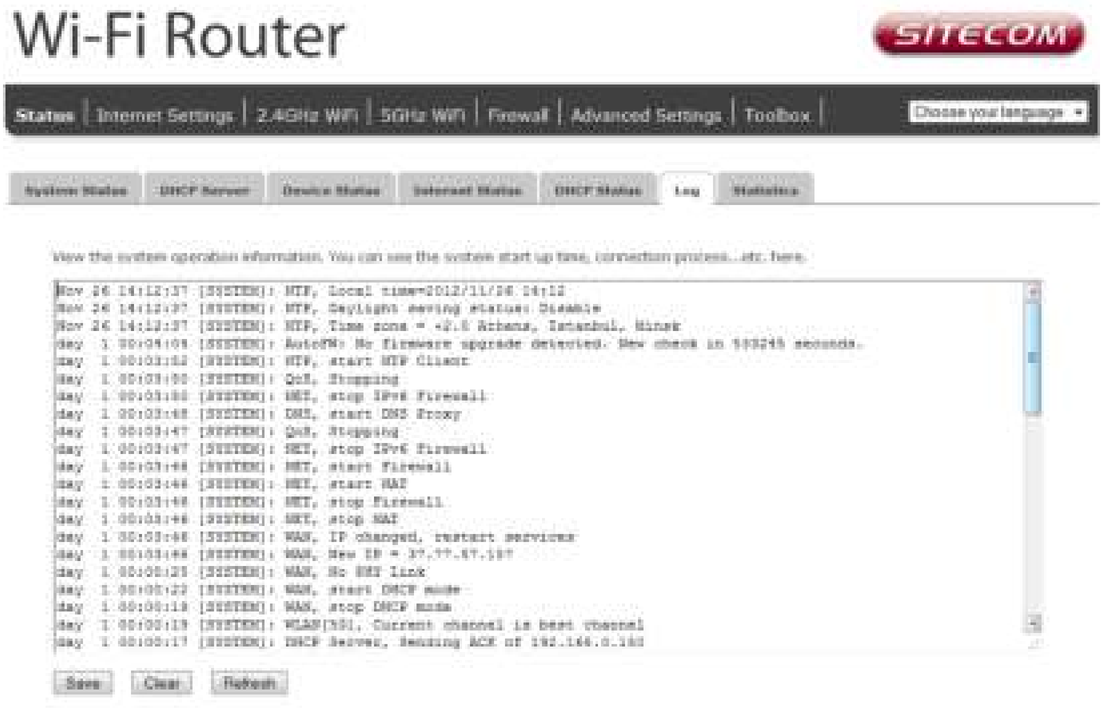
IP address	MAC address

Current Static DHCP Table :

NO.	IP address	MAC address	Select

WLR-7100 Log

View the operation log of the router. This page shows the current system log of the router. It displays any event that occurred during or 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.

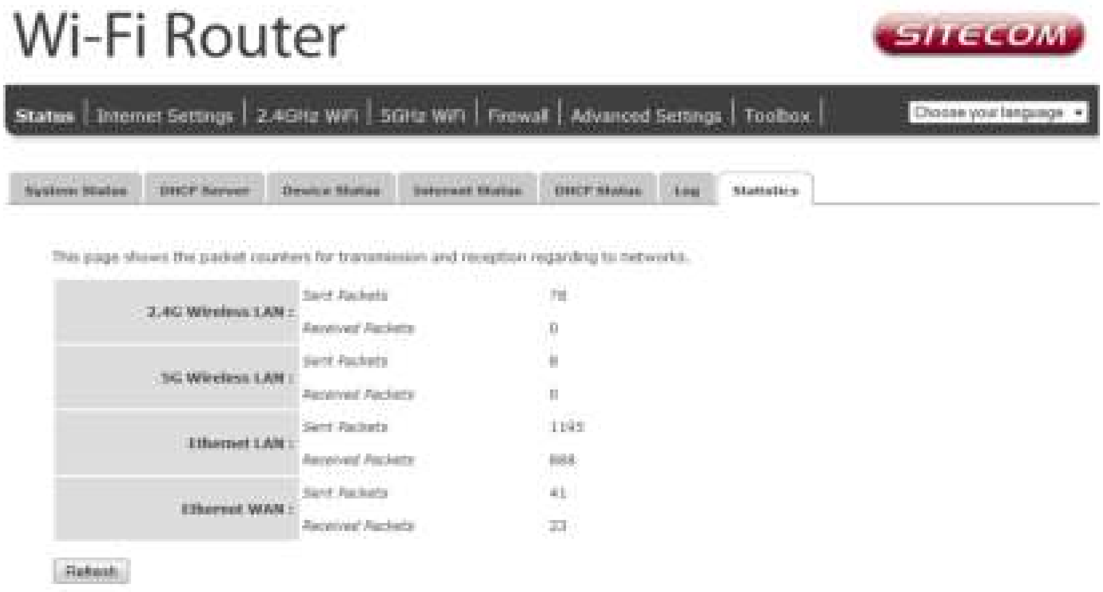


View the system operation information. You can see the system start up time, connection process...etc. here.

```
Nov 26 14:12:37 [SYSTEM]: NTP, Local time=2012/11/26 14:12
Nov 26 14:12:37 [SYSTEM]: NTP, Daylight saving status: Disable
Nov 26 14:12:37 [SYSTEM]: NTP, Time zone = +2.0 Athens, Istanbul, Minsk
day  1 00:04:08 [SYSTEM]: AutoFW: No firmware upgrade detected. New check in 593245 seconds.
day  1 00:03:52 [SYSTEM]: NTP, start NTP Client
day  1 00:03:50 [SYSTEM]: QoS, Stopping
day  1 00:03:50 [SYSTEM]: NET, stop IPv6 Firewall
day  1 00:03:48 [SYSTEM]: DNS, start DNS Proxy
day  1 00:03:47 [SYSTEM]: QoS, Stopping
day  1 00:03:47 [SYSTEM]: NET, stop IPv6 Firewall
day  1 00:03:46 [SYSTEM]: NET, start Firewall
day  1 00:03:46 [SYSTEM]: NET, start NAT
day  1 00:03:46 [SYSTEM]: NET, stop Firewall
day  1 00:03:46 [SYSTEM]: NET, stop NAT
day  1 00:03:46 [SYSTEM]: WAN, IP changed, restart services
day  1 00:03:46 [SYSTEM]: WAN, New IP = 37.77.47.197
day  1 00:00:25 [SYSTEM]: WAN, No ETH Link
day  1 00:00:22 [SYSTEM]: WAN, start DHCP mode
day  1 00:00:19 [SYSTEM]: WAN, stop DHCP mode
day  1 00:00:19 [SYSTEM]: WLAN[5G], Current channel is best channel
day  1 00:00:17 [SYSTEM]: DHCP Server, Sending ACK of 192.168.0.100
```

WLR-7100 Statistics

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



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

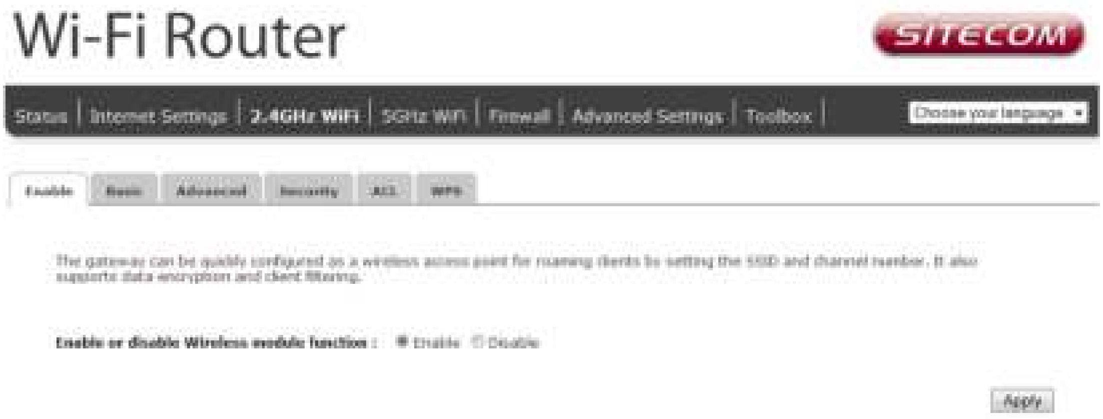
2.4G Wireless LAN :	Sent Packets	78
	Received Packets	0
5G Wireless LAN :	Sent Packets	8
	Received Packets	0
Ethernet LAN :	Sent Packets	1145
	Received Packets	888
Ethernet WAN :	Sent Packets	41
	Received Packets	23

Wireless Settings

You can set parameters that are used for the wireless stations to connect to this router for the 2.4 GHz radio or 5 GHz radio. The parameters include Mode, ESSID, Channel Number and Associated Client.

Wireless Function

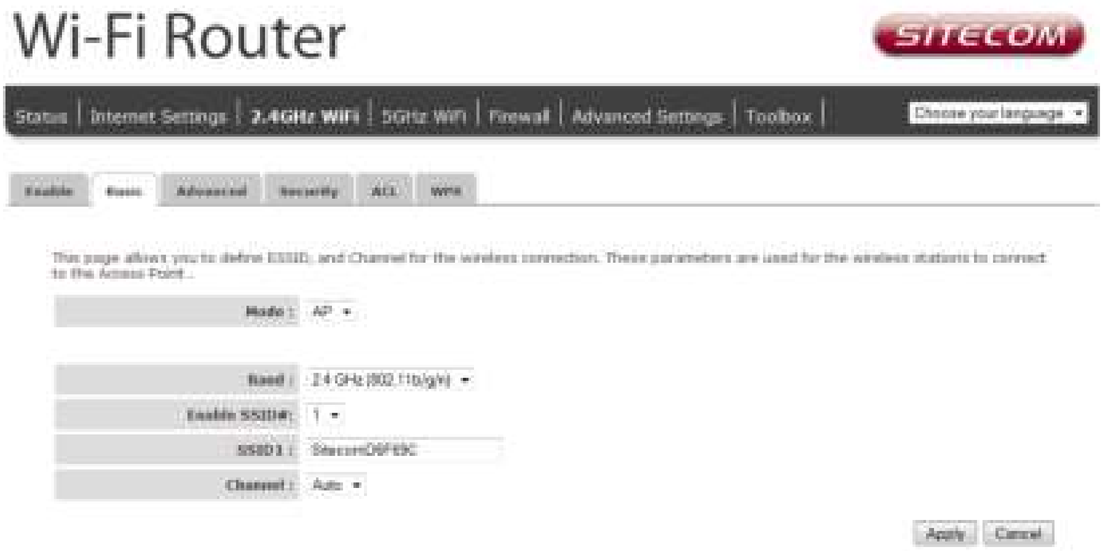
Enable or Disable Wireless function here. Click Apply and wait for module to be ready & loaded.



The gateway can be quickly configured as a wireless access point for roaming clients by setting the SSID and channel number. It also supports data encryption and client filtering.

Enable or disable Wireless module function : ● Enable ○ Disable

Basic Settings



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.

Mode : AP

Band : 2.4 GHz (802.11b/g/n)

Enable SSID#: 1

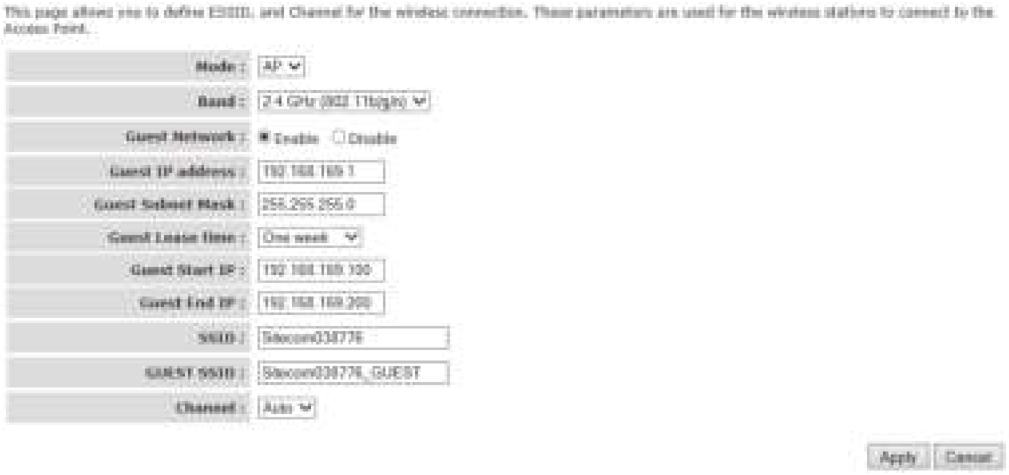
SSID1 : SitecomD9F69C

Channel : Auto

- **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. For the 5GHz mode you can set 802.11a, 802.11n, 802.11a/n or 802.11ac mode.

- **Guest Network**: Enable this to activate the Guest Network. Devices connected to the Guest network will have Internet connection but no access to the main network and cannot communicate with each other
- **SSID**: This is the name of the wireless signal which is broadcasted. All the devices in the same wireless LAN should have the same SSID.
- **Channel**: The channel used by the wireless LAN. All devices in the same wireless LAN should use the same channel.

Guest Network



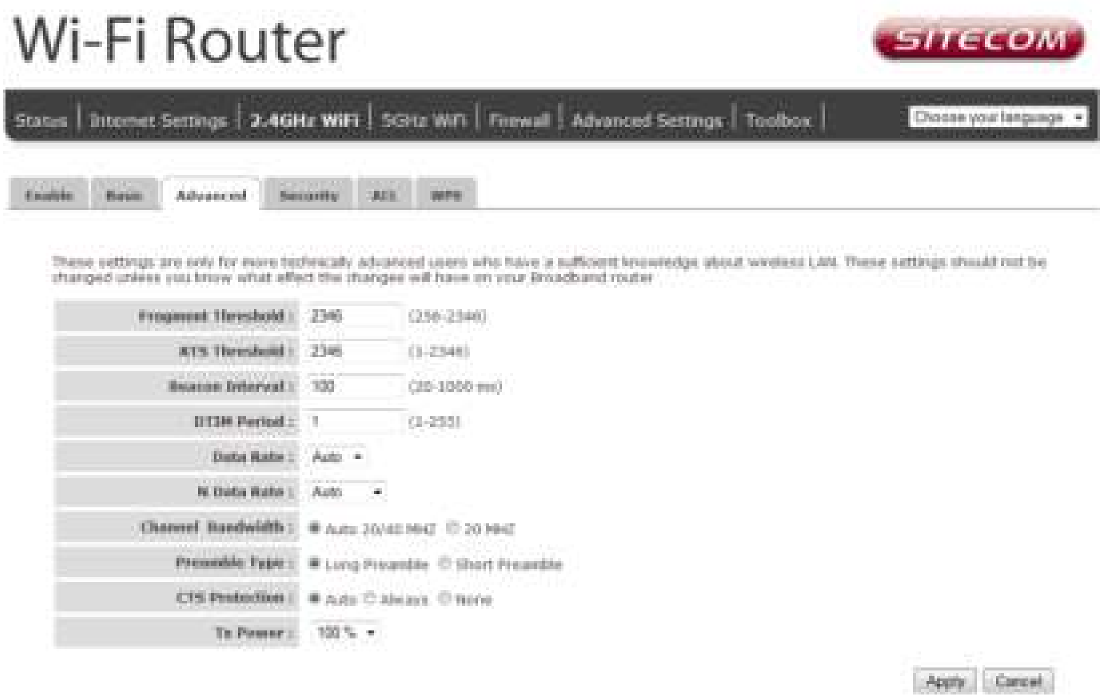
This page allows you to define ESSID, and Channel for the wireless connection. These parameters are used for the wireless stations to connect to the Access Point.

Mode :	AP
Band :	2.4 GHz (802.11b/g/n)
Guest Network :	● Enable ○ Disable
Guest IP address :	192.168.169.1
Guest Subnet Mask :	255.255.255.0
Guest Lease Time :	One week
Guest Start IP :	192.168.169.100
Guest End IP :	192.168.169.200
SSID :	Sitecom038776
GUEST SSID :	Sitecom038776_GUEST
Channel :	Auto

- **Guest IP address**: The gateway address for the Guest Network. This address cannot be the same as the default router's IP Address.
- **Guest Subnet Mask**: The Subnet Mask for the Guest network. This address cannot be the same as the default router's Subnet Mask.
- **Guest Lease Time**: One Week. 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.
- **Guest Start IP + End IP**: You can select a particular IP address range for your DHCP server to issue IP addresses to your LAN Clients. The default IP range is 192.168.169.100 ~ 192.168.169.200. This address pool cannot be the same as the default router's DHCP Address pool.
- **Guest SSID**: This is the name of the wireless signal which is broadcasted as the Guest Network. This name cannot be the same as the default SSID.

Advanced Settings

This tab allows you to set the advanced wireless options. The options included are, 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.


Wi-Fi Router
SITECOM
Status | Internet Settings | 2.4GHz WiFi | 5GHz WiFi | Firewall | Advanced Settings | Toolbox
Choose your language
Enable
Basic
Advanced
Security
ACL
WPS
Apply
Cancel

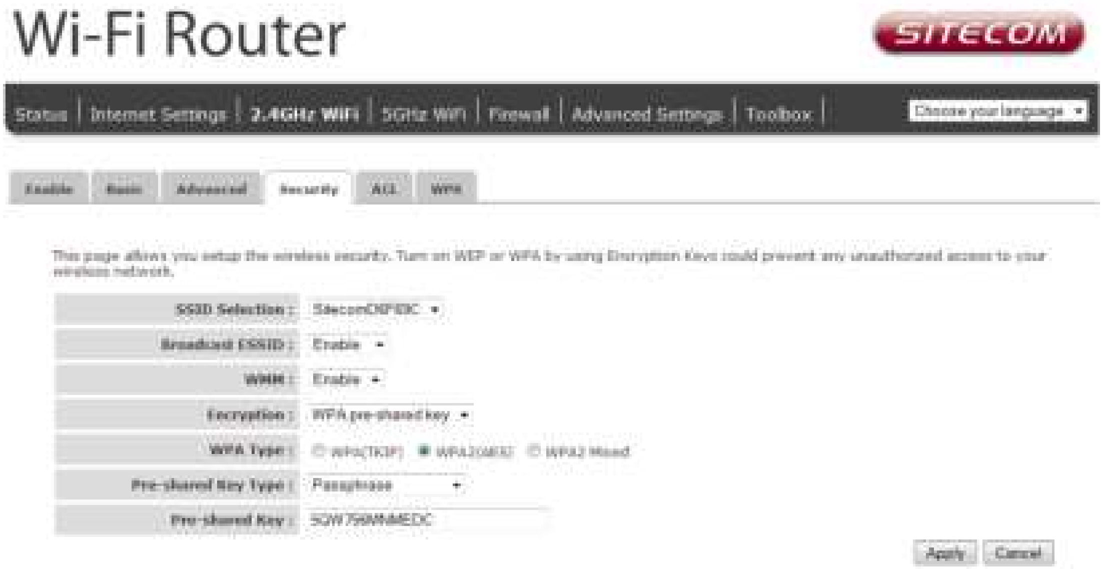
These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Broadband router

Fragment Threshold :	2346	(256-2346)
RTS Threshold :	2346	(1-2346)
Beacon Interval :	100	(20-1000 ms)
DTIM Period :	1	(1-255)
Data Rate :	Auto	
N Data Rate :	Auto	
Channel Bandwidth :	● Auto 20/40 MHZ ○ 20 MHZ	
Preamble Type :	● Long Preamble ○ Short Preamble	
CTS Protection :	● Auto ○ Always ○ None	
Tx Power :	100 %	

- **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 then the RTS threshold, the wireless router will not use the RTS/CTS mechanism to send this packet.
- **Beacon Interval**: This 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**: This 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.
- **TX Power**: The transmit power can be set to a bare minimum or maximum power for better performance or power saving.

Security

This router 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.

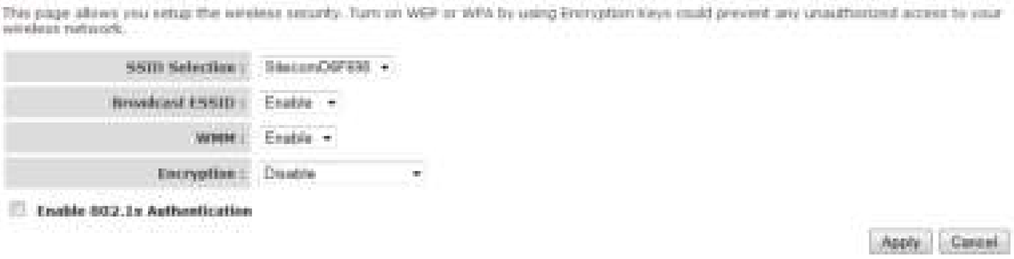

Wi-Fi Router
SITECOM
Status | Internet Settings | 2.4GHz WiFi | 5GHz WiFi | Firewall | Advanced Settings | Toolbox |
Choose your language
Enable
Basic
Advanced
Security
ACL
WPS
Apply
Cancel

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.

SSID Selection :	SitecomD9F83C
Broadcast ESSID :	Enable
WMM :	Enable
Encryption :	WPA pre-shared key
WPA Type :	○ WPA(TKIP) ● WPA2(AES) ○ WPA2 Mixed
Pre-shared Key Type :	Passphrase
Pre-shared Key :	SQW798MNMEDC

Disable

When you choose to disable encryption, it is very insecure to use the router.

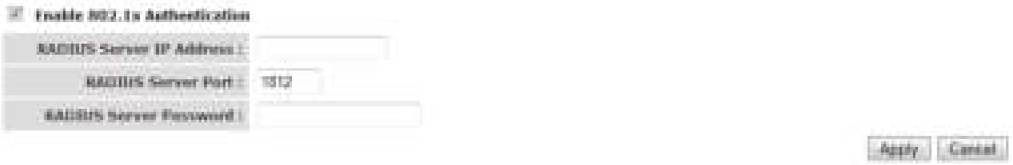


This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Selection :	SitecomD9F838
Broadcast ESSID :	Enable
WMM :	Enable
Encryption :	Disable

□ Enable 802.1x Authentication

Enable 802.1x Authentication

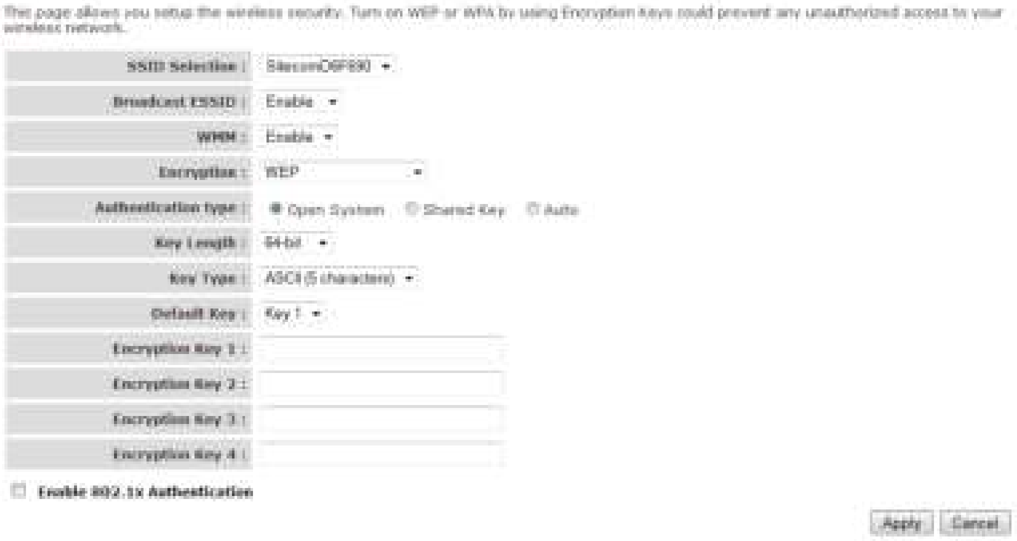


☑ Enable 802.1x Authentication

RADIUS Server IP Address :	
RADIUS Server Port :	1812
RADIUS Server Password :	

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

WEP



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.

SSID Selection :	SitecomD6F690
Broadcast ESSID :	Enable
WMM :	Enable
Encryption :	WEP
Authentication type :	● Open System ○ Shared Key ○ Auto
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 :	

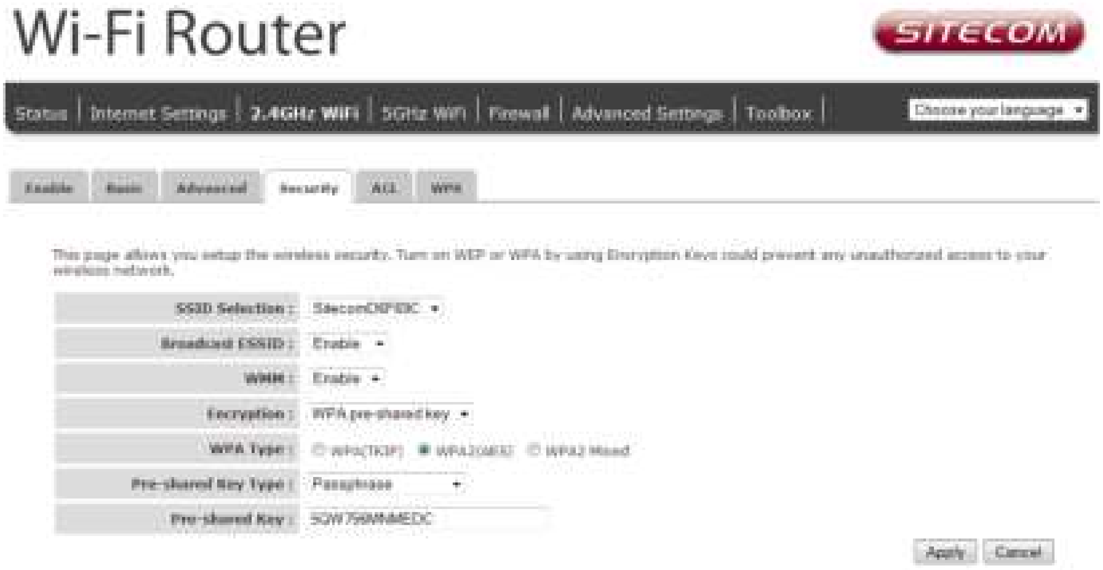
□ Enable 802.1x Authentication

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.

- **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 Type**: 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 configuration.

WPA Pre-shared Key

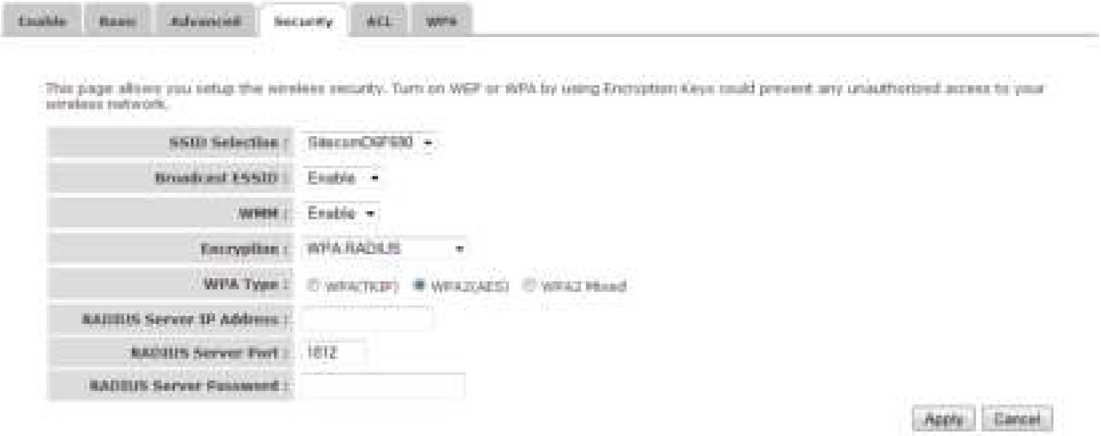


This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Selection :	SitecomD9F0DC
Broadcast ESSID :	Enable
WMM :	Enable
Encryption :	WPA pre-shared key
WPA Type :	○ WPA(TKIP) ● WPA2(AES) ○ WPA2 Mixed
Pre-shared Key Type :	Passphrase
Pre-shared Key :	5QW756MNMEDC

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.

WPA-Radius

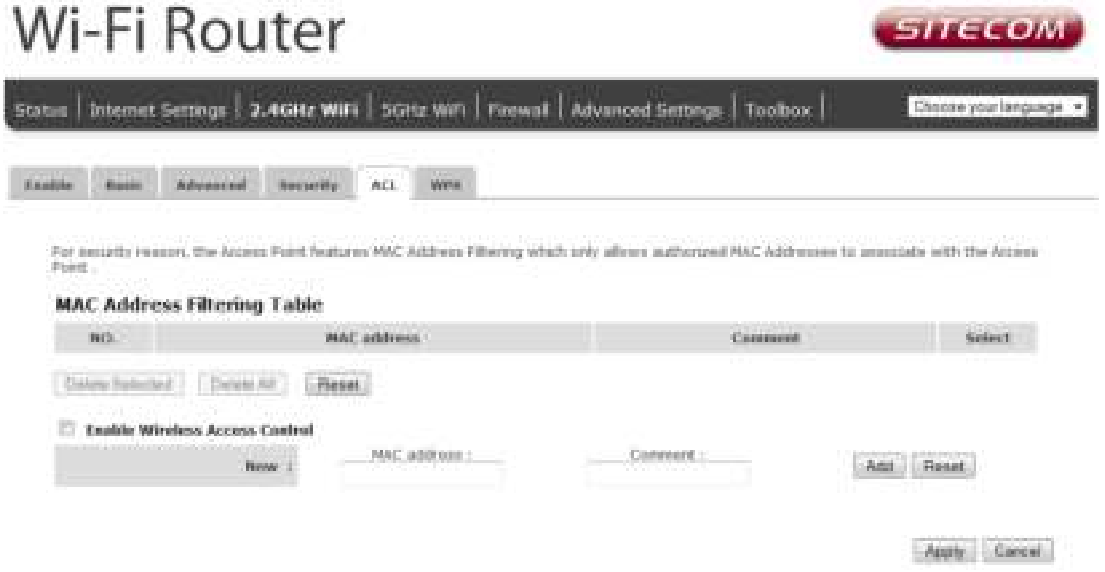


This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Selection :	SitecomD9F690
Broadcast ESSID :	Enable
WMM :	Enable
Encryption :	WPA RADIUS
WPA Type :	○ WPA(TKIP) ● WPA2(AES) ○ WPA2 Mixed
RADIUS Server IP Address :	
RADIUS Server Port :	1812
RADIUS Server Password :	

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** when you are done.

ACL



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

□ Enable Wireless Access Control

MAC address :

Comment :

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

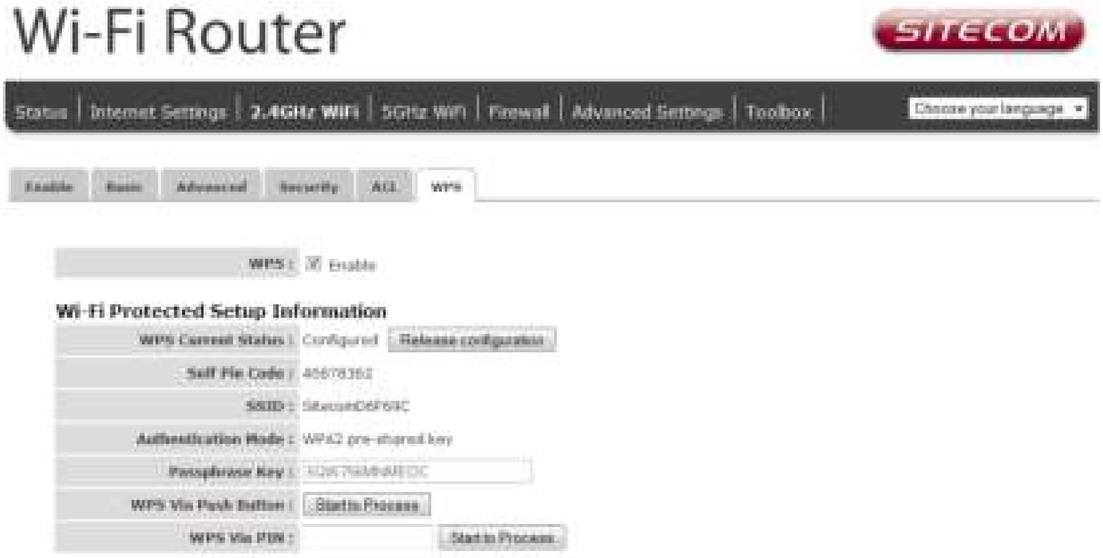
- **Enable wireless access control**: Enables the wireless access control function
- **Adding an address into the list**: Enter the "MAC Address" and "Comment" of the wireless station to be added and then click "Add". The wireless station will now be added into the "Current Access Control List" below. 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.



WPS : ☑ Enable

Wi-Fi Protected Setup Information

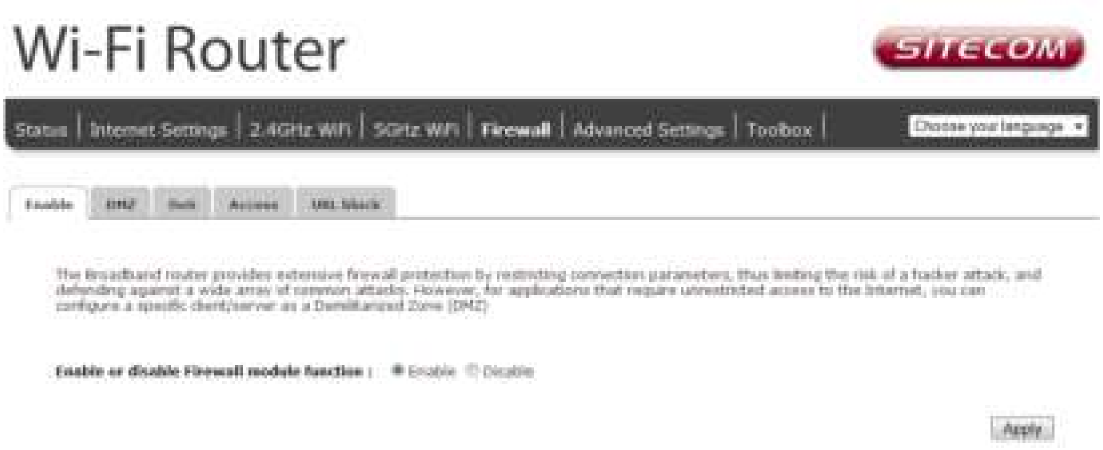
WPS Current Status :	Configured
Self Pin Code :	46878362
SSID :	SitecomD6F69C
Authentication Mode :	WPA2 pre-shared key
Passphrase Key :	[illegible]
WPS Via Push Button :	
WPS Via PIN :	

- **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.

Firewall Settings

The 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**

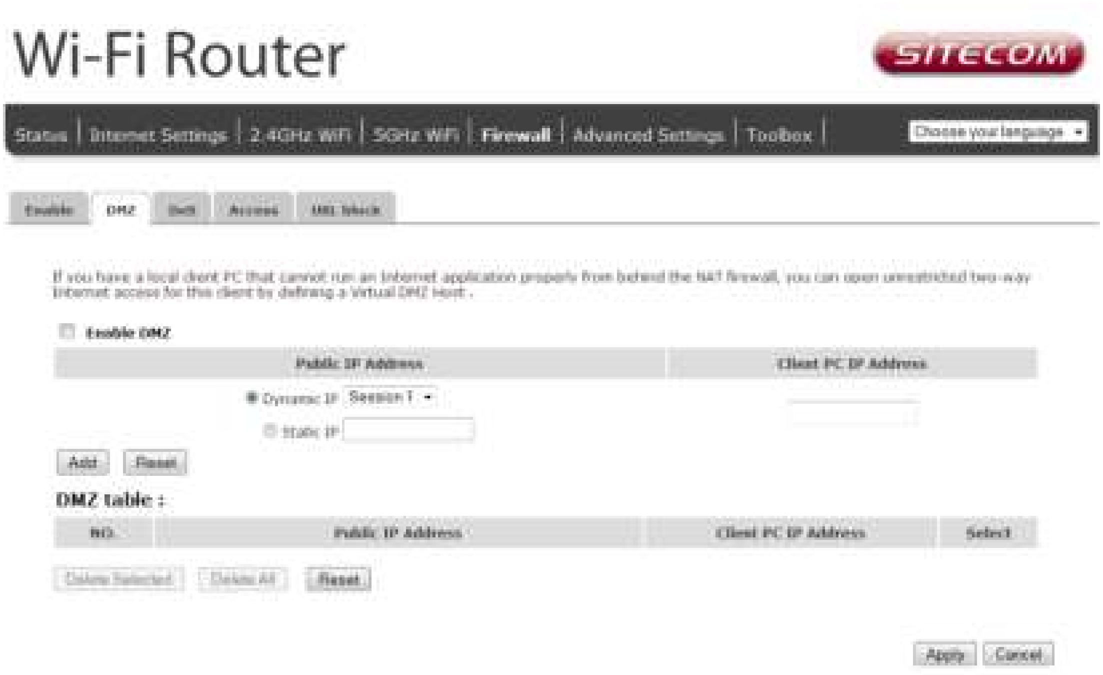


The Broadband router provides extensive firewall protection by restricting connection parameters, thus limiting the risk of a hacker attack, and defending against a wide array of common attacks. However, for applications that require unrestricted access to the Internet, you can configure a specific client/server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

Enable or disable Firewall module function : ● Enable ○ Disable

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.



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
● Dynamic IP Session 1 ○ Static IP	

DMZ table :

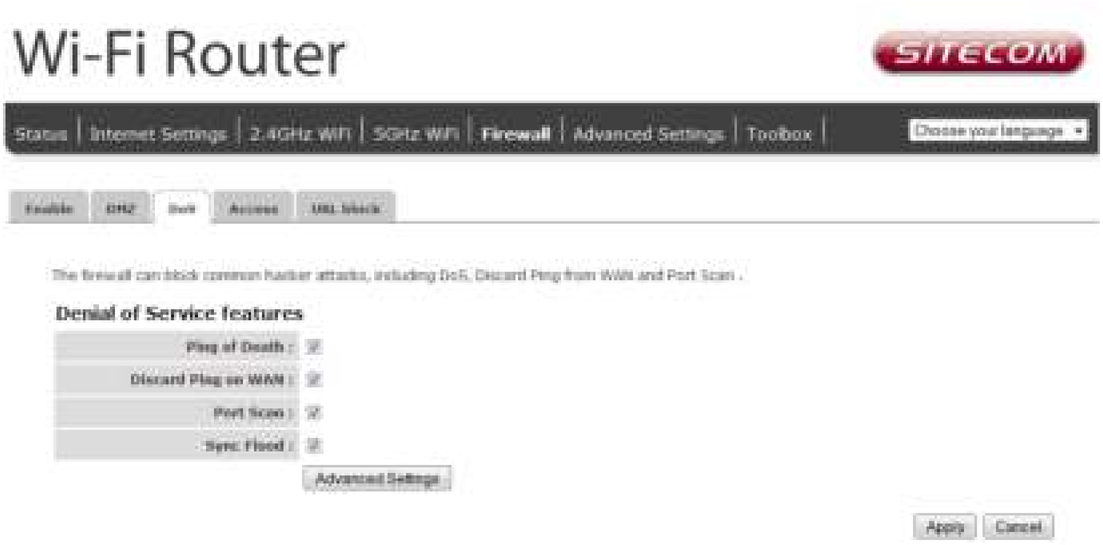
NO.	Public IP Address	Client PC IP Address	Select

- **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.


Wi-Fi Router
SITECOM
Status | Internet Settings | 2.4GHz WiFi | 5GHz WiFi | Firewall | Advanced Settings | Toolbox |
Choose your language
Enable
DMZ
DoS
Access
URL block
Advanced Settings
Apply
Cancel

The firewall can block common hacker attacks, including DoS, Discard Ping from WAN and Port Scan .

Denial of Service features

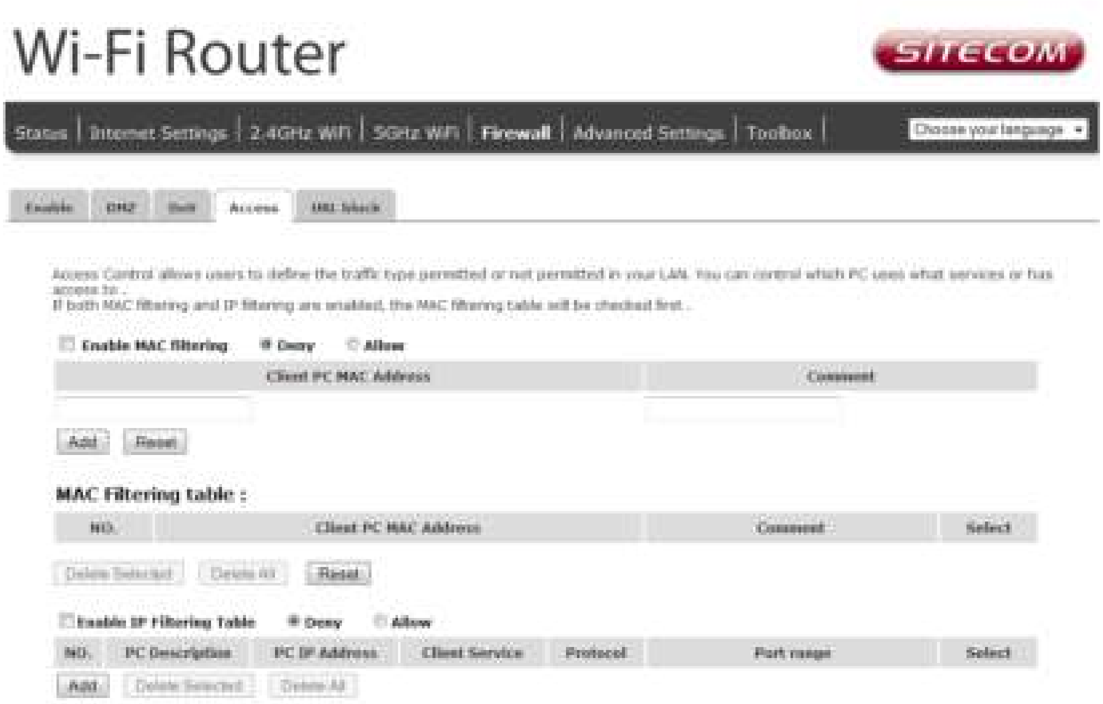
Ping of Death : ☑
Discard Ping on WAN : ☑
Port Scan : ☑
Sync Flood : ☑

- **Ping of Death**: Protection from Ping of Death attacks
- **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.

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

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.



Access Control allows users to define the traffic type permitted or not permitted in your LAN. You can control which PC uses what services or has access to .
If both MAC filtering and IP filtering are enabled, the MAC filtering table will be checked first .

□ Enable MAC filtering ● Deny ○ Allow

Client PC MAC Address	Comment

MAC Filtering table :

NO.	Client PC MAC Address	Comment	Select

□ Enable IP Filtering Table ● Deny ○ Allow

NO.	PC Description	PC IP Address	Client Service	Protocol	Port range	Select

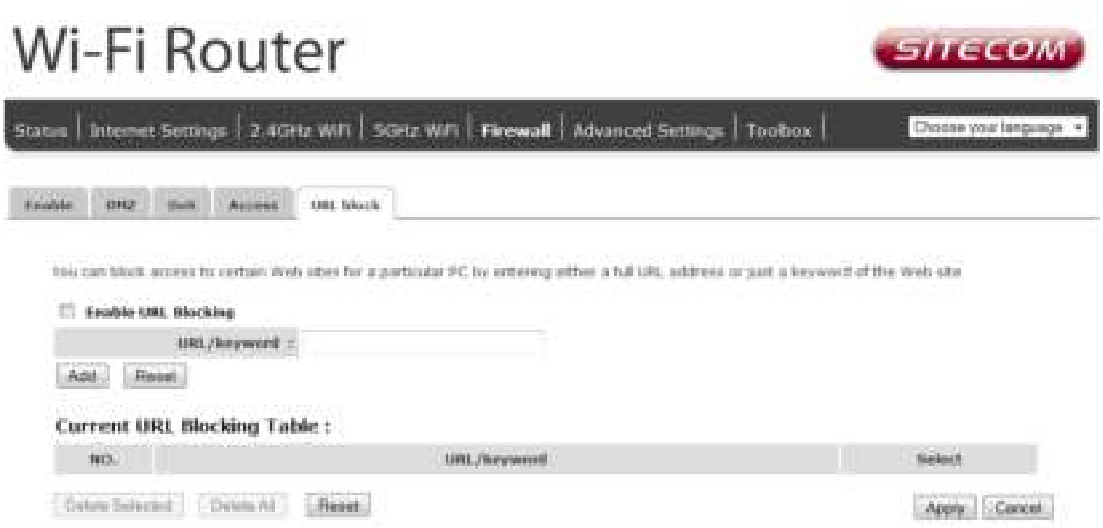
- **Deny**: If you select "Deny" then all clients will be allowed to access Internet accept for the clients in the list below.
- **Allow**: If you select "Allow" then all clients will be denied to access Internet accept for the PCs in the list below.
- **Filter client PCs by IP**: Fill in "IP Filtering 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.



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 :

Current URL Blocking Table :

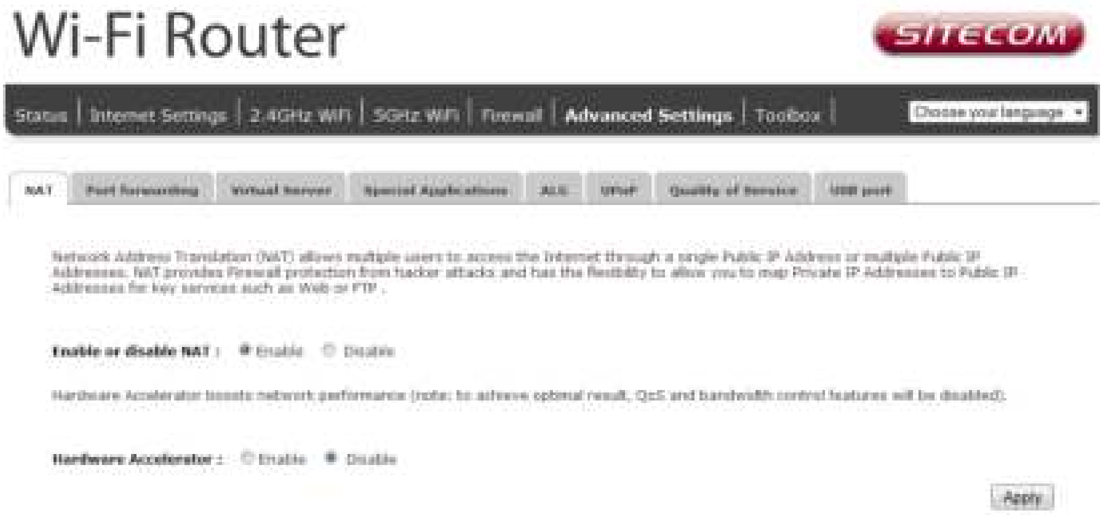
NO.	URL/keyword	Select

- **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 configuration.

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.



Network Address Translation (NAT) allows multiple users 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 Web or FTP .

Enable or disable NAT : ● Enable ○ Disable

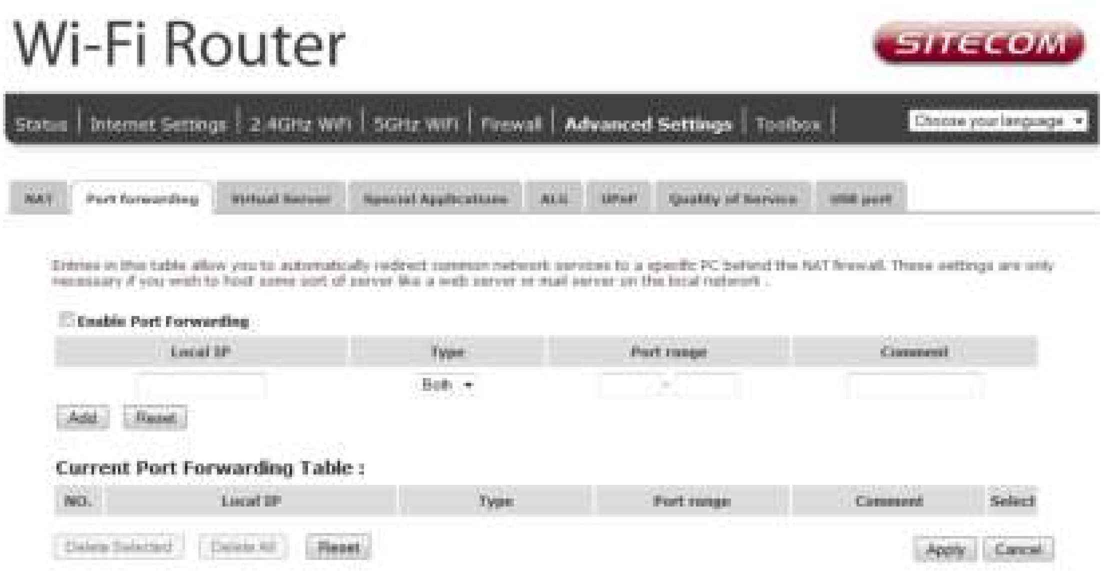
Hardware Accelerator boosts network performance (note: to achieve optimal result, QoS and bandwidth control features will be disabled).

Hardware Accelerator : ○ Enable ● Disable

- **NAT:** Select **Disable** to disable the NAT function.
- **Hardware Accelerator:** Select Enable to use hardware acceleration for routing. This gives a speed increase in WAN->LAN performance. Please note that this disables the QoS service.

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.



Entries in this table allow you to automatically redirect common network services to a specific PC behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the local network .

□ Enable Port Forwarding

Local IP	Type	Port range	Comment
	Both	-	

Current Port Forwarding Table :

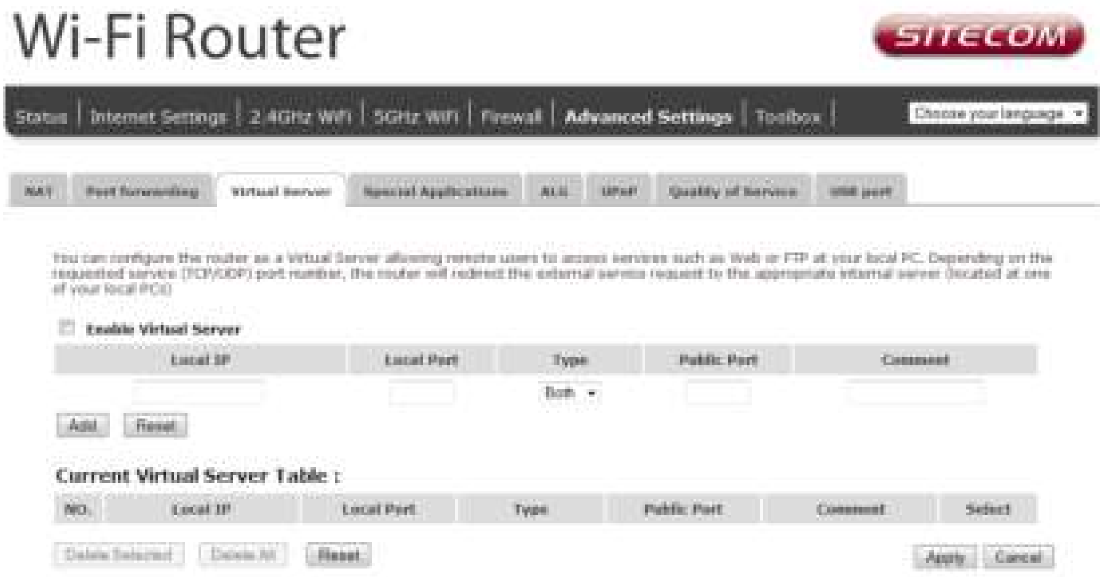
NO.	Local IP	Type	Port range	Comment	Select

- **Enable Port Forwarding**: Enable Port Forwarding
- **Local 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**: 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**: 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.

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

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
		Both		

Current Virtual Server Table :

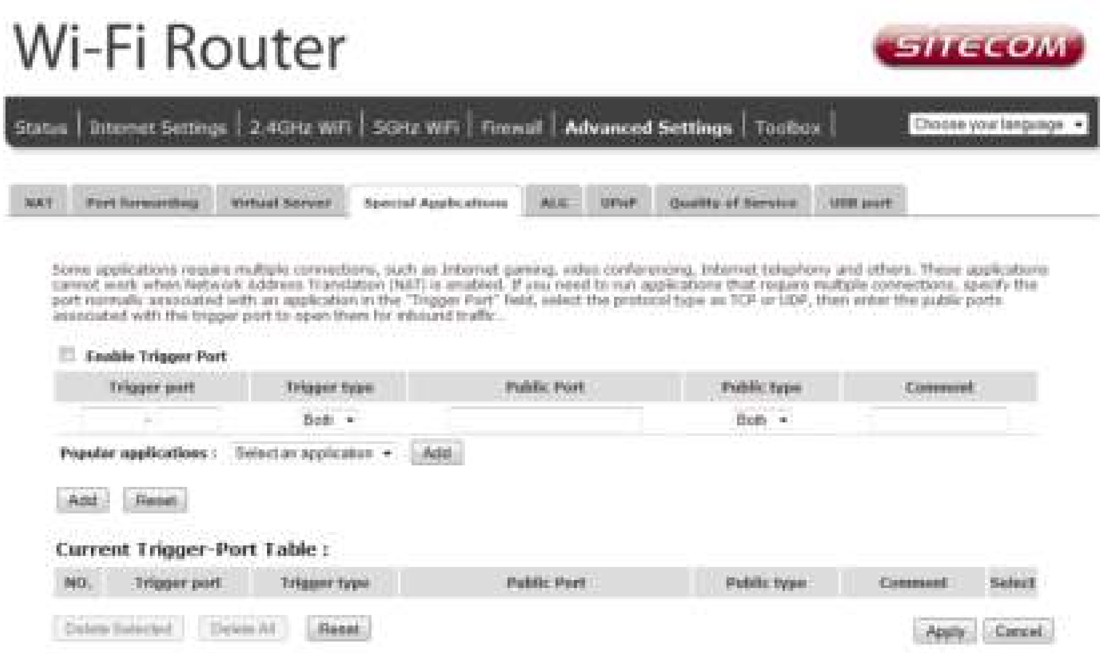
NO.	Local IP	Local Port	Type	Public Port	Comment	Select

- **Enable Virtual Server**: Enable Virtual Server.
- **Local IP**: This is the LAN client/host IP address that the Public Port number packet will be sent to.
- **Local 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**: 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.
- **Reset**: 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 configuration.

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.



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

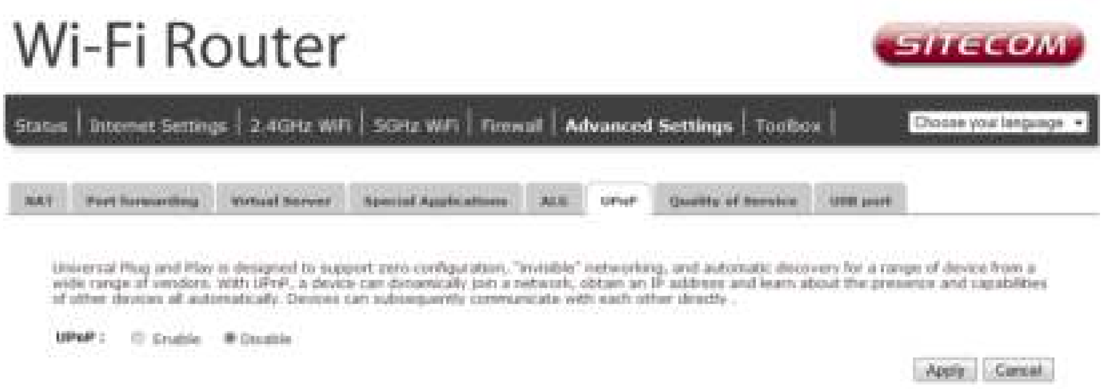
[Delete Selected] [Delete All] [Reset] [Apply] [Cancel]

- **Enable Trigger Port**: Enable the Special Application function.
- **Trigger Port**: This is the outgoing (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).
- **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**: 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.
- **Reset**: 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.

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

UPnP

With UPnP, all PCs in you 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.



Universal Plug and Play is designed to support zero-configuration, "invisible" networking, and automatic discovery for a range of device from a wide range of vendors. With UPnP, a device can dynamically join a network, obtain an IP address and learn about the presence and capabilities of other devices all automatically. Devices can subsequently communicate with each other directly .

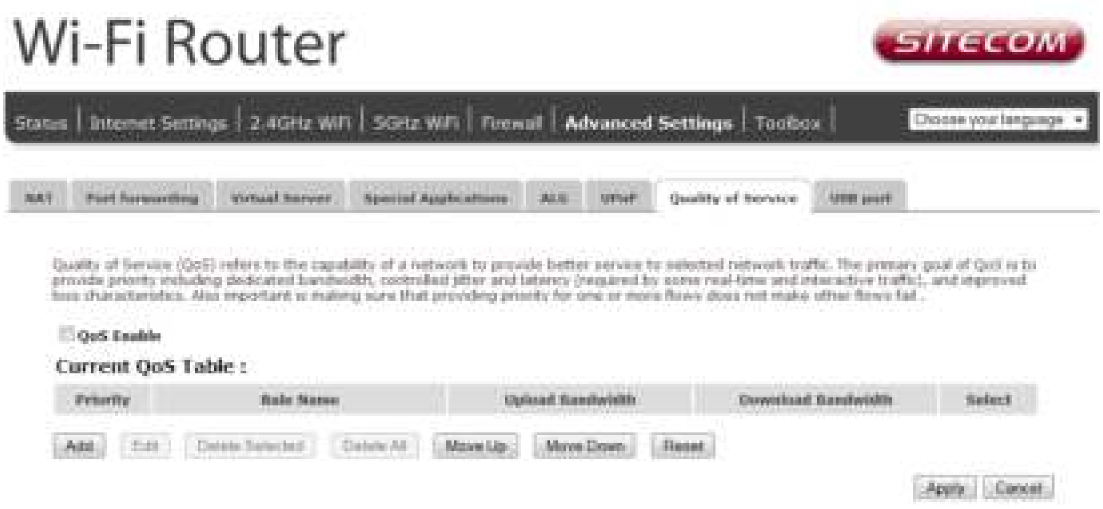
UPnP : ○ Enable ● Disable

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.

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

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 .

□ QoS Enable

Current QoS Table :

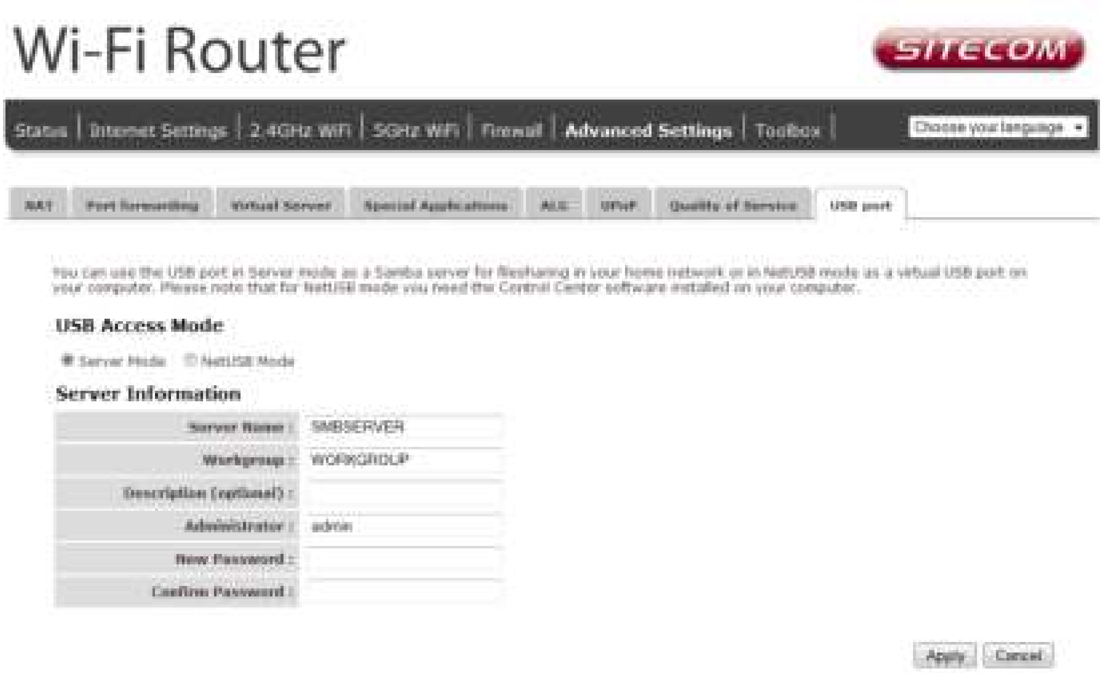
Priority	Rule Name	Upload Bandwidth	Download Bandwidth	Select

- **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.

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

USB port

You can use the USB port in Server mode as a Samba server for filesharing in your home network or in NetUSB mode as a virtual USB port on your computer. Please note that for NetUSB mode you need the USB Port Control Center software installed on your computer.



You can use the USB port in Server mode as a Samba server for filesharing in your home network or in NetUSB mode as a virtual USB port on your computer. Please note that for NetUSB mode you need the Control Center software installed on your computer.

USB Access Mode

● Server Mode ○ NetUSB Mode

Server Information

Server Name :	SMBSERVER
Workgroup :	WORKGROUP
Description (optional) :	
Administrator :	admin
New Password :	
Confirm Password :	

- **Server name**: Enter a name for the network share.
- **Workgroup**: If you wish to add the share to your workgroup enter the workgroup name here.
- **Description**: Enter a desired description for the share.
- **Administrator**: Enter a desired username for access to the share.
- **New Password**: Enter the password for access to the share and confirm this password by re-entering it in the Confirm password field

For netUSB make sure the radio button next to netUSB is selected and press **Apply**. Please see Addendum A: USB Port Control Center for more information about netUSB.

Toolbox Settings

Sitecom Cloud Security

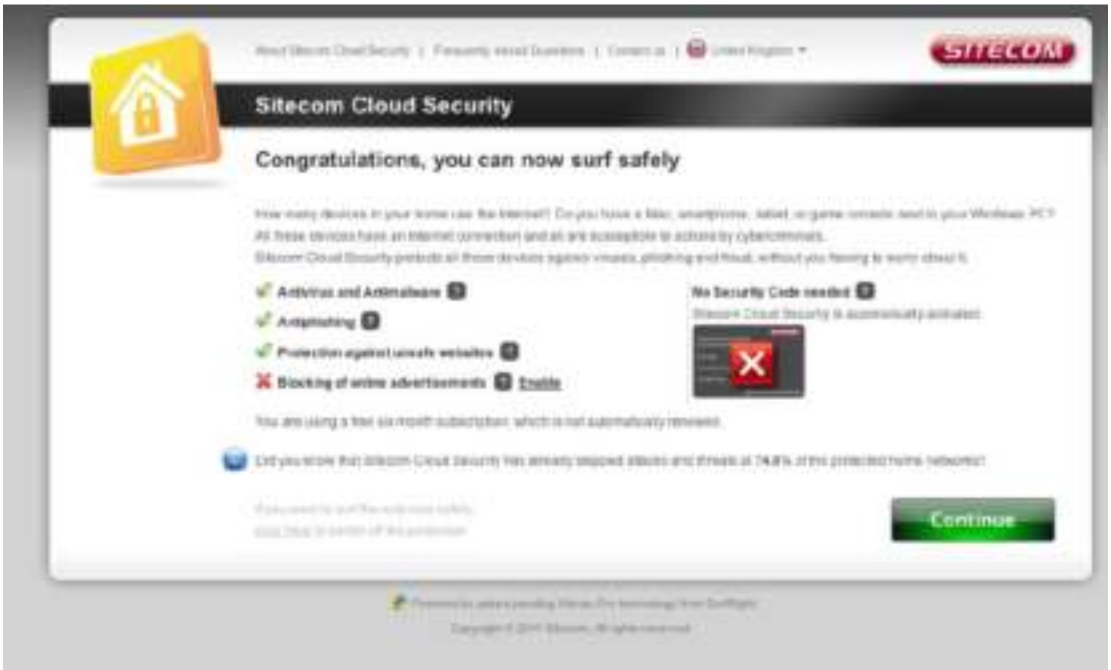
Antivirus software alone is not safe enough. You can now benefit from additional built-in security in your modem or router. Protect all devices in your home network against cybercrime while browsing. Activate in just one click, your network and devices are better secured than ever before.

Your Sitecom device comes with a 6 month free Sitecom cloud security subscription.

Activating Sitecom Cloud Security

After you have set up your Sitecom device for internet access, open the web browser and enter http://www.sitecomcloudsecurity.com in the address bar.

If the device has been properly configured the following web page should be shown.



Sitecom Cloud Security

Congratulations, you can now surf safely

[illegible]

✓ Antivirus and Antimalware

✓ Antiphishing

✓ Protection against unsafe websites

✗ Blocking of online advertisements Enable

No Security Code needed

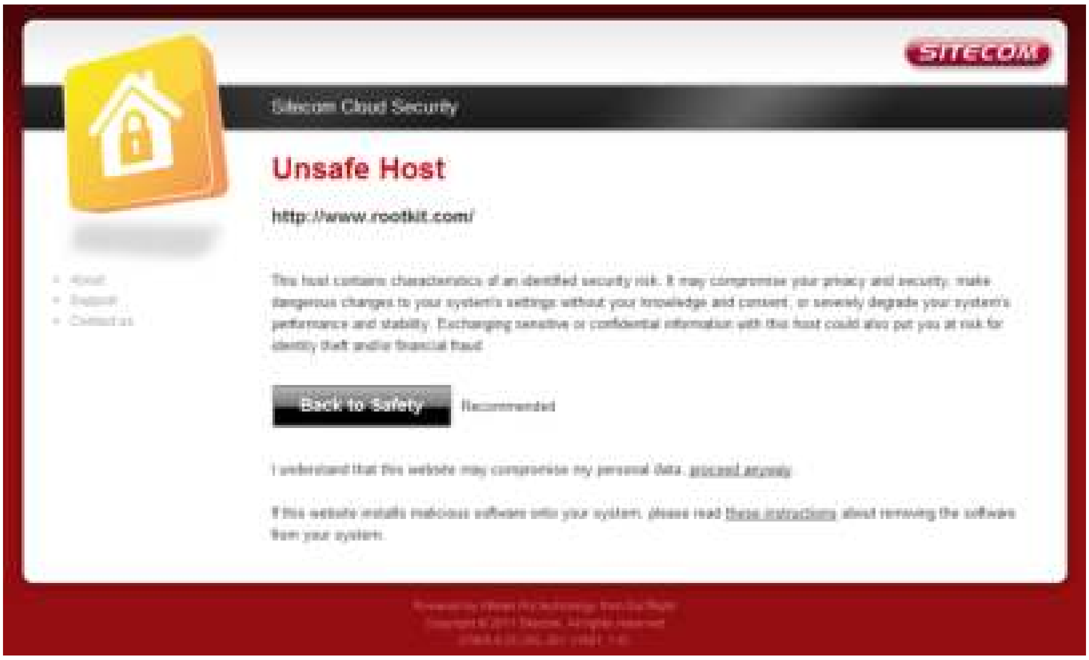
[illegible]

Here you can see which security features are activated.

The Sitecom Cloud Security service offers the following protection options:

- Anti-Malware
- Anti-Phishing
- Protection against unsafe websites
- Advertisement blocking

With the protection of unsafe websites activated the Sitecom Cloud Security will always check if a website is safe. If it is not safe it will inform you that is not safe to enter.



Unsafe Host

http://www.rootkit.com/

- About
- Support
- Contact us

This host contains characteristics of an identified security risk. It may compromise your privacy and security, make dangerous changes to your system's settings without your knowledge and consent, or severely degrade your system's performance and stability. Exchanging sensitive or confidential information with this host could also put you at risk for identity theft and/or financial fraud.

Recommended

I understand that this website may compromise my personal data. proceed anyway

If this website installs malicious software onto your system, please read these instructions about removing the software from your system.

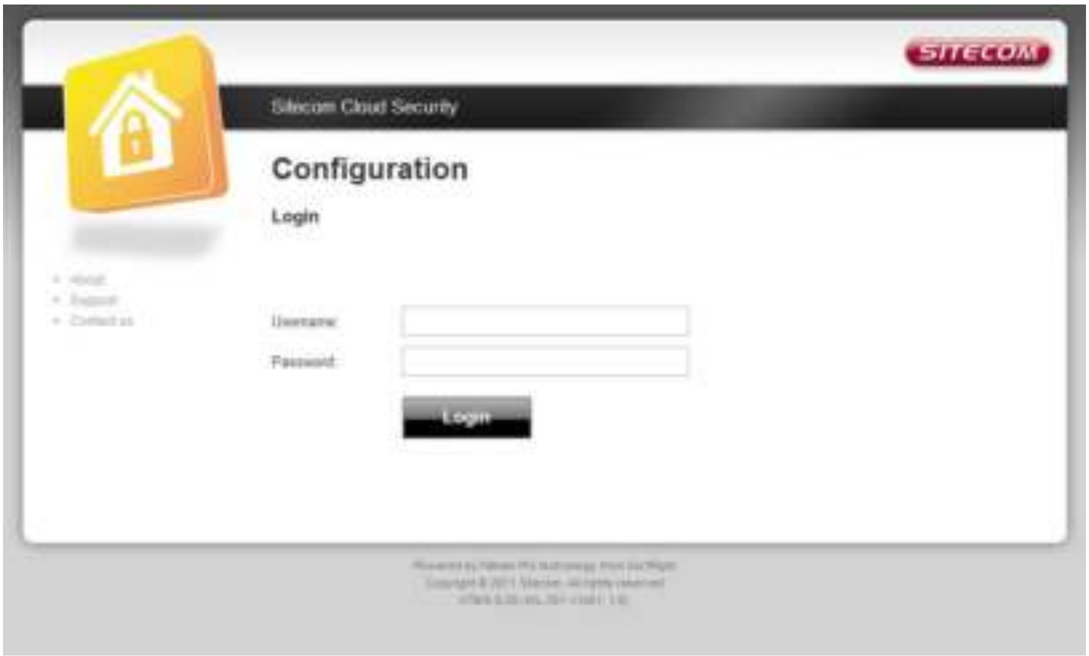
[illegible]
Copyright © 2011 Sitecom. All rights reserved
[illegible]

If you still wish to visit this webpage click on 'proceed anyway'. Alternatively click 'Back to Safety' so that your security will not be breached.

Configuring Sitecom Cloud Security

If you wish to change your security options or to extend your subscription at any time, open http://www.sitecomcloudsecurity.com from your web browser.

You will be asked for a username and password. These can be found on the backlabel on the bottom of your Sitecom router or modem.



Configuration

Login

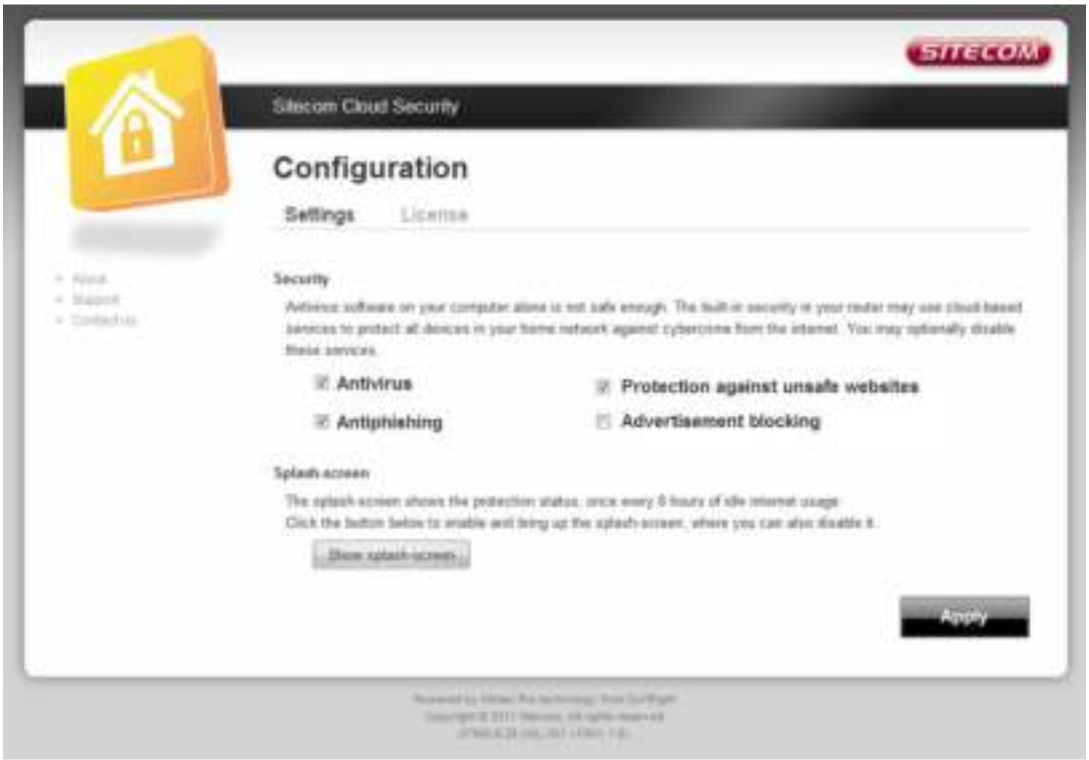
- About
- Support
- Contact us

Username:

Password:

[illegible]
Copyright © 2011 Sitecom. All rights reserved
[illegible]

If the login succeeded you can click on 'Settings' to change your security options.



Configuration

Settings   License

Security

Antivirus software on your computer alone is not safe enough. The built-in security in your router may use cloud based services to protect all devices in your home network against cybercrime from the internet. You may optionally disable these services.

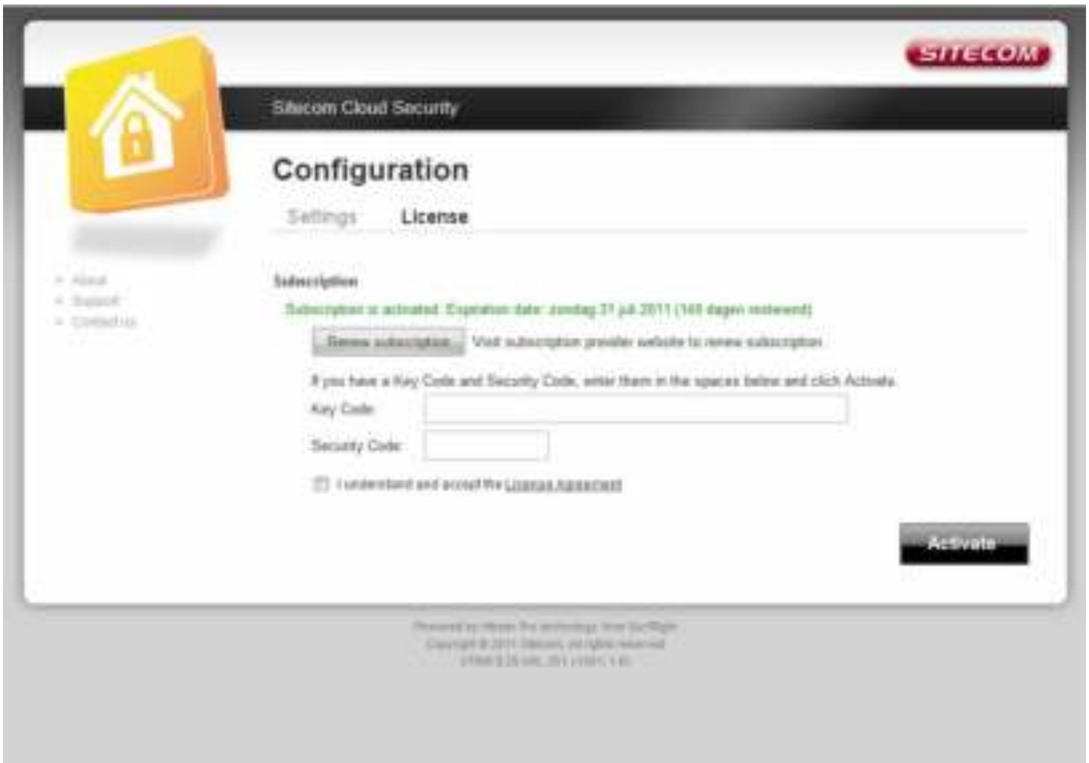
☑ Antivirus   ☑ Protection against unsafe websites

☑ Antiphishing   □ Advertisement blocking

Splash screen

The splash-screen shows the protection status, once every 8 hours of idle internet usage.
Click the button below to enable and bring up the splash-screen, where you can also disable it.

Or click 'License' to renew your subscription.



Configuration

Settings   License

Subscription

Subscription is activated. Expiration date: zondag 31 juli 2011 (148 dagen resterend)

Visit subscription provider website to renew subscription

If you have a Key Code and Security Code, enter them in the spaces below and click Activate.

Key Code:

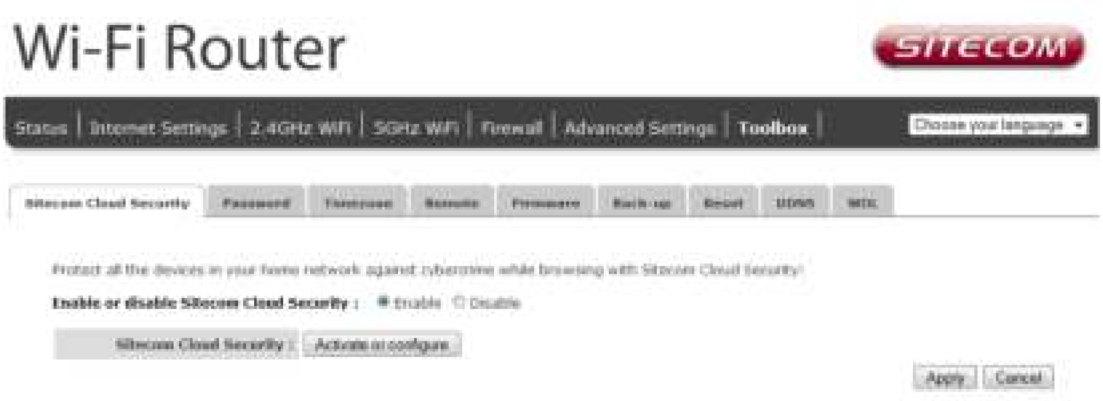
Security Code:

□ I understand and accept the License Agreement

Disabling Sitecom Cloud Security

If you wish to disable to Sitecom cloud security at any time, open the webpage of your Sitecom product and log in with the supplied credentials (these can be found on the back label on the bottom of your Sitecom device).

Go to Toolbox and select “Sitecom Cloud Security”.



Protect all the devices in your home network against cybercrime while browsing with Sitecom Cloud Security!

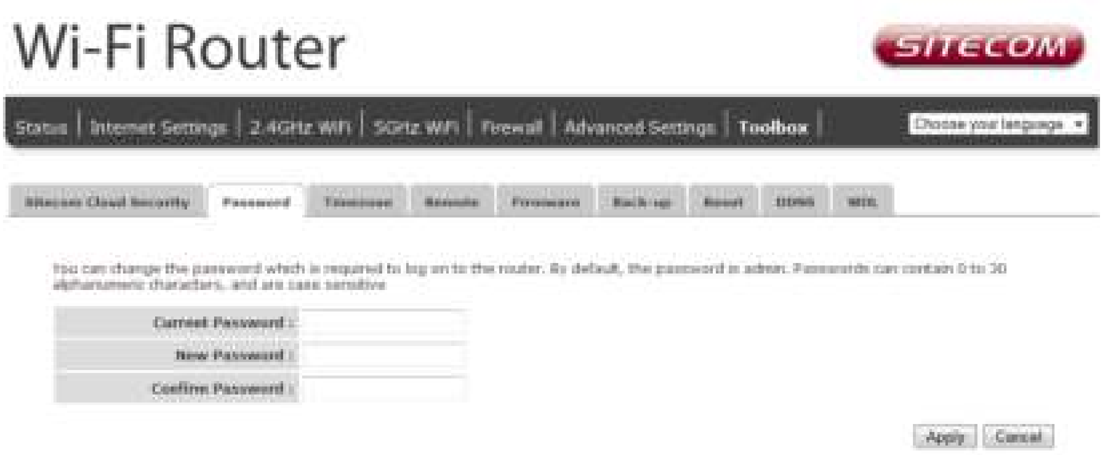
Enable or disable Sitecom Cloud Security : ● Enable ○ Disable

Sitecom Cloud Security :

Click the “Disable” radio button and click ‘**Apply’** for the settings to take effect.

Password

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



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

Current Password :

New Password :

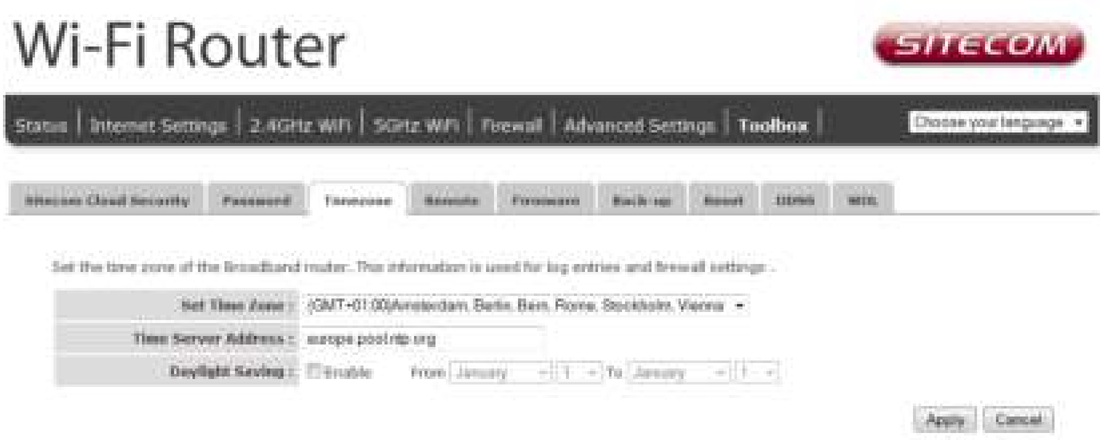
Confirm Password :

- **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 configuration.

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.



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

Set Time Zone : (GMT+01:00)Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna

Time Server Address : europe.pool.ntp.org

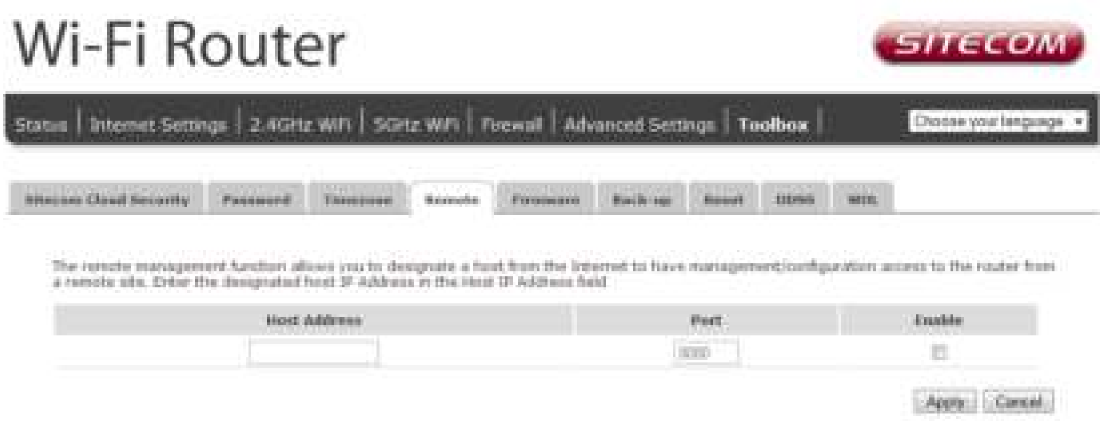
Daylight Saving : □ Enable From January 1 To January 1

- **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 boxto 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 configuration.

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.



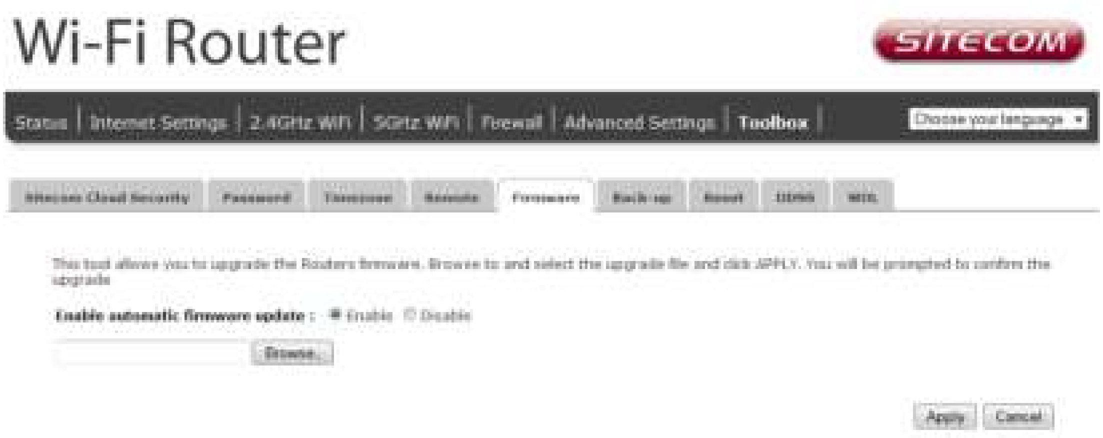
The remote management function allows you to designate a host from the Internet to have management/configuration access to the router from a remote site. Enter the designated host IP Address in the Host IP Address field.

Host Address	Port	Enable
	[illegible]	□

- **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 configuration.

Firmware Upgrade



This tool allows you to upgrade the Routers firmware. Browse to and select the upgrade file and click APPLY. You will be prompted to confirm the upgrade

Enable automatic firmware update : ● Enable ○ Disable

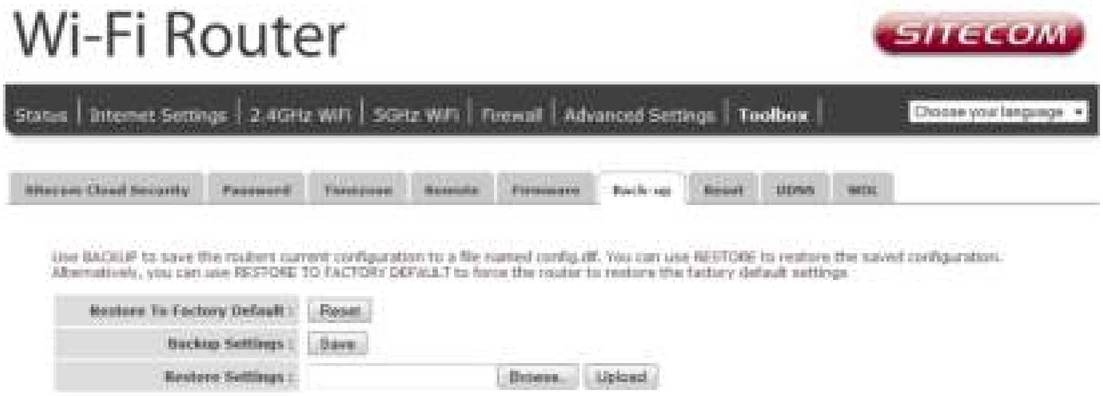
Enable automatic firmware update: When enabled the router will periodically check if a new firmware is available. If a new firmware is detected the router will give a notification.

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 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 BACKUP to save the routers current configuration to a file named config.dlf. You can use RESTORE to restore the saved configuration. Alternatively, you can use RESTORE TO FACTORY DEFAULT to force the router to restore the factory default settings.

Restore To Factory Default : Reset

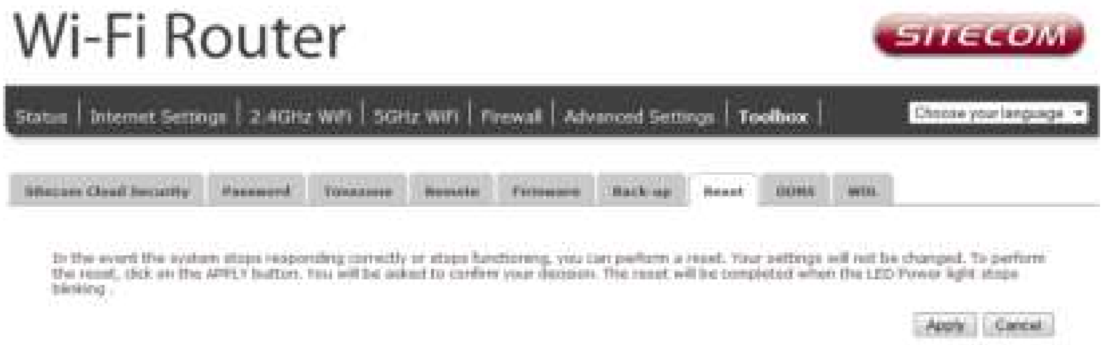
Backup Settings : Save

Restore Settings : Browse... Upload

Use the "Backup" tool to save the 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 router. Alternatively, you can use the "Restore to Factory Defaults" tool to force the router to perform a power reset and restore the original factory settings.

Reset

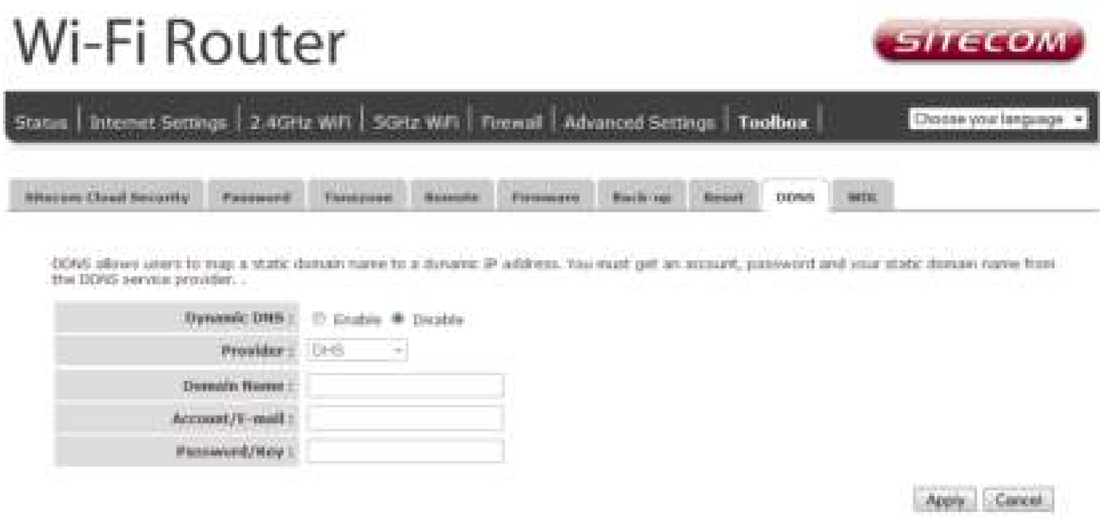
You can reset the router’s system should any problem exist. The reset function essentially re-boots your router’s system.



In the event the system stops responding correctly or stops functioning, you can perform a reset. Your settings will not be changed. To perform the reset, click on the APPLY button. You will be asked to confirm your decision. The reset will be completed when the LED Power light stops blinking .

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.



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 :	DHS
Domain Name :	
Account/E-mail :	
Password/Key :	

- **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 configuration.

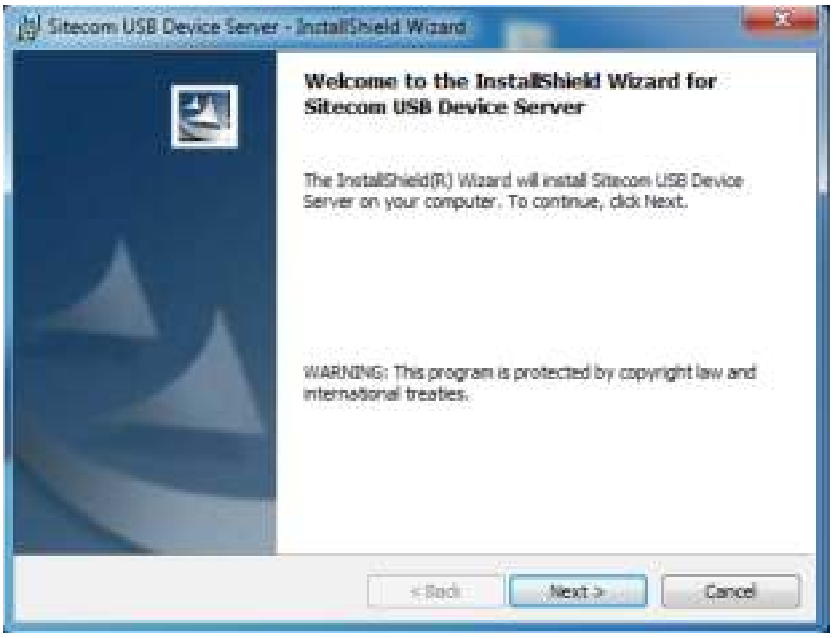
Addendum A: USB Port Control Center

The netUSB functionality of your router requires additional software to work with your computer. The following section will describe how the software can be installed and used.

Windows

Insert the CD-ROM that was included with your router and select install utility from the cd-menu.

The software will inform you about what will be installed.



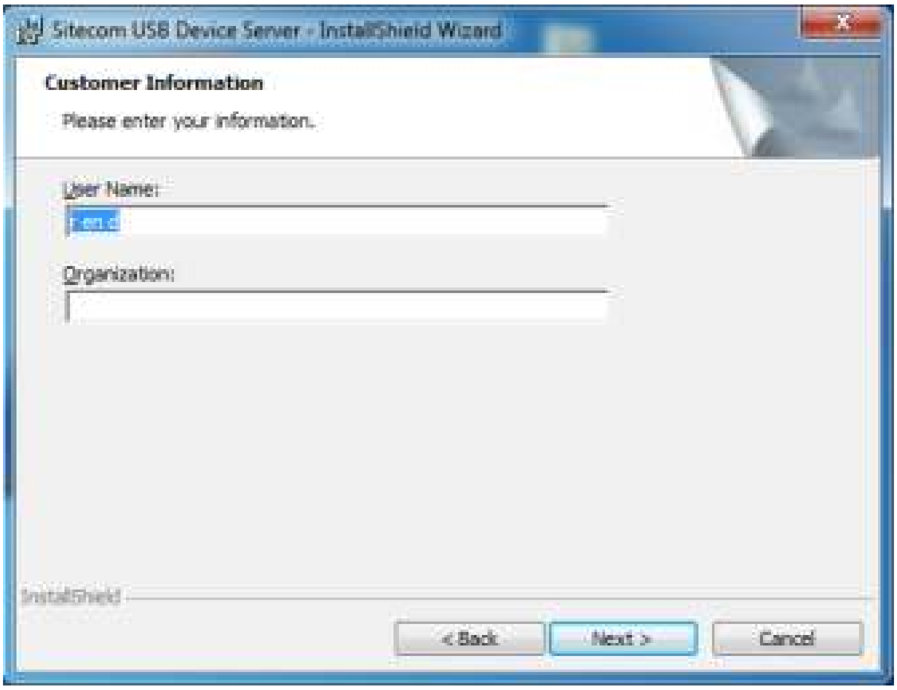
Sitecom USB Device Server - InstallShield Wizard

Welcome to the InstallShield Wizard for Sitecom USB Device Server

The InstallShield(R) Wizard will install Sitecom USB Device Server on your computer. To continue, click Next.

WARNING: This program is protected by copyright law and international treaties.

Click **Next** to continue the installation.


Sitecom USB Device Server - InstallShield Wizard

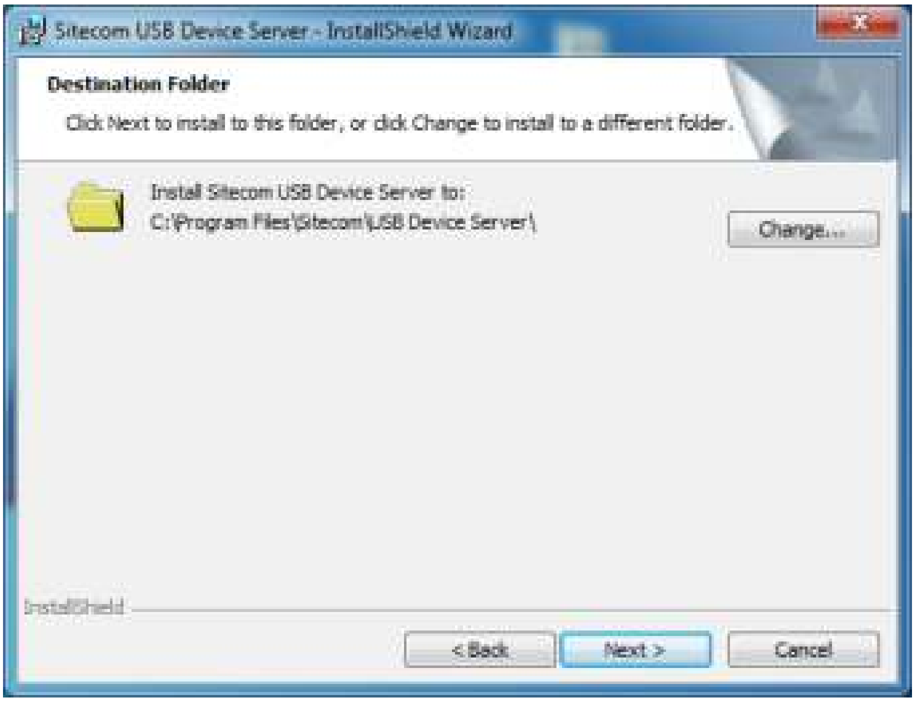
Customer Information

Please enter your information.

User Name: r-en.d

Organization:

Enter your username and organization if applicable and click **Next** to continue.

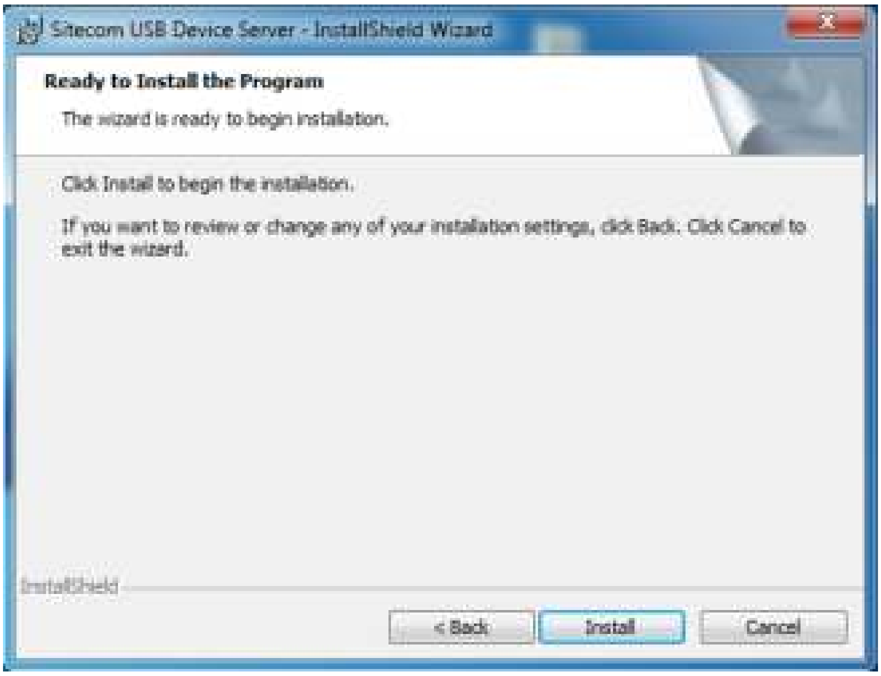

Sitecom USB Device Server - InstallShield Wizard

Destination Folder

Click Next to install to this folder, or click Change to install to a different folder.

Install Sitecom USB Device Server to:
C:\Program Files\Sitecom\USB Device Server\

Choose a folder where the software should be installed or keep it to default and click **Next** to continue.



Sitecom USB Device Server - InstallShield Wizard

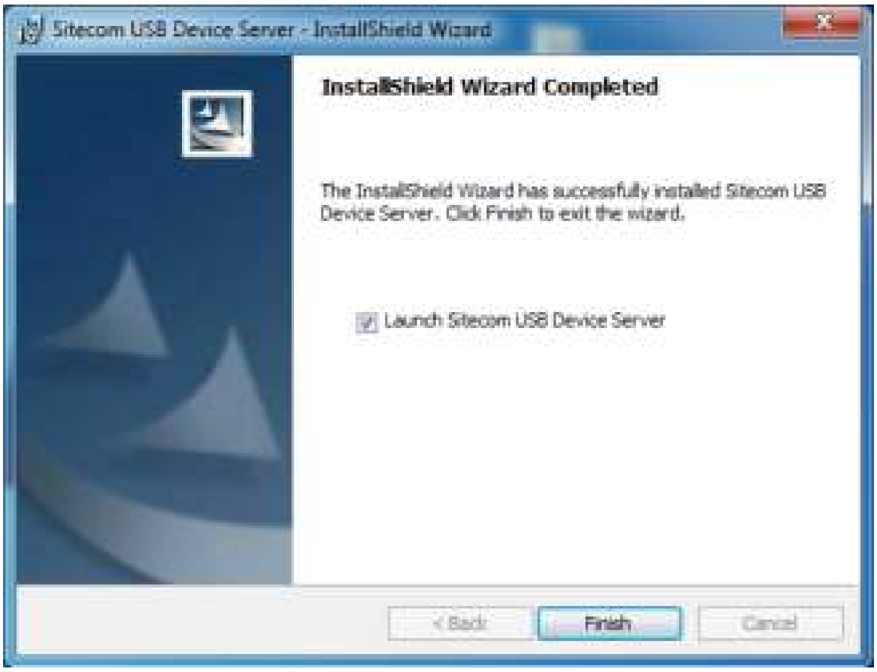
Ready to Install the Program

The wizard is ready to begin installation.

Click Install to begin the installation.

If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.

The software is now ready to be installed, Click **Install** to continue.



Sitecom USB Device Server - InstallShield Wizard

InstallShield Wizard Completed

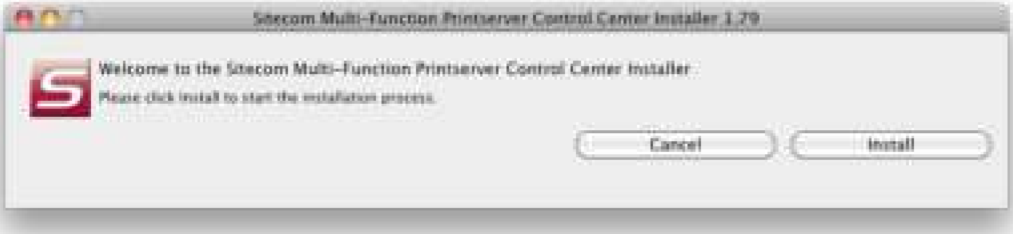
The InstallShield Wizard has successfully installed Sitecom USB Device Server. Click Finish to exit the wizard.

☑ Launch Sitecom USB Device Server

Once the installation is finished the software will inform you. If "**Launch Sitecom USB Device Server**" checked the software will automatically be launched after you clicked **Finish**.

MacOS

Insert the CD-ROM that was included with your router and select “**Install**” from the cd-menu.

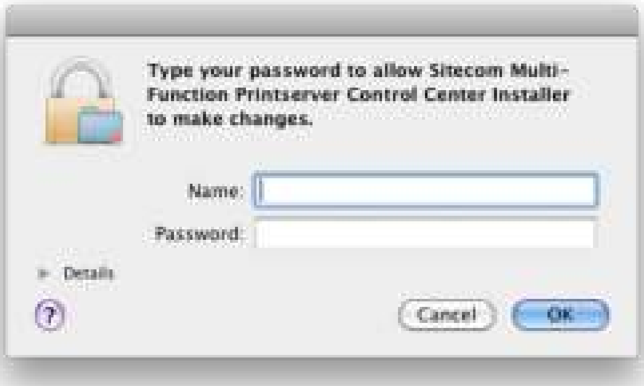


Sitecom Multi-Function Printserver Control Center Installer 1.29

Welcome to the Sitecom Multi-Function Printserver Control Center Installer

Please click Install to start the installation process.

Click **Install** to continue installation.

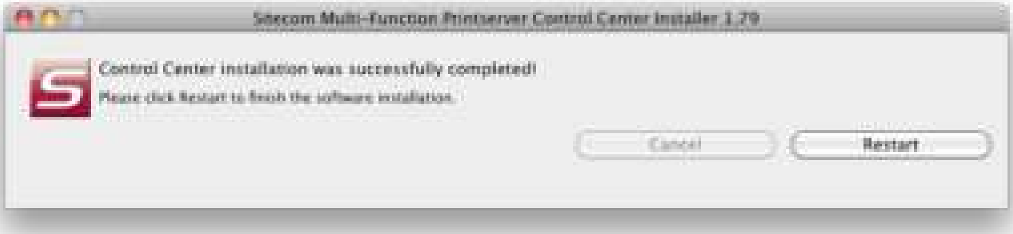


Type your password to allow Sitecom Multi-Function Printserver Control Center Installer to make changes.

Name:

Password:

Enter your Mac username and password and click **OK** to continue.



Sitecom Multi-Function Printserver Control Center Installer 1.29

Control Center installation was successfully completed!

Please click Restart to finish the software installation.

Once the installation is finished the software will inform you and requires to restart the system.

Connect & Disconnect

“NetUSB” allows you to use USB printers when they’re actually connected to the Sitecom USB server.

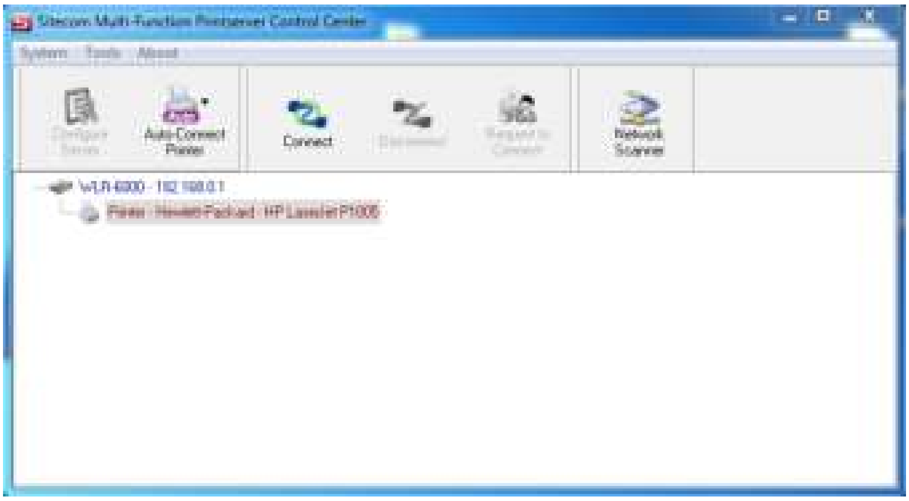
The “connect” operation is a software operation that simulates an actual USB device plug-in. Therefore, when you do a “connect” operation in the Control Center, the PC can detect a USB device’s plug-in, although actually you do not plug in any USB device to your PC. Similarly, the “disconnect” operation is a software operation that simulates the disconnection of the USB device.

Note: If a USB device is “connected” by a PC, we say that PC has the ownership of the USB device. Only one PC can get the ownership of a USB device at the same time.

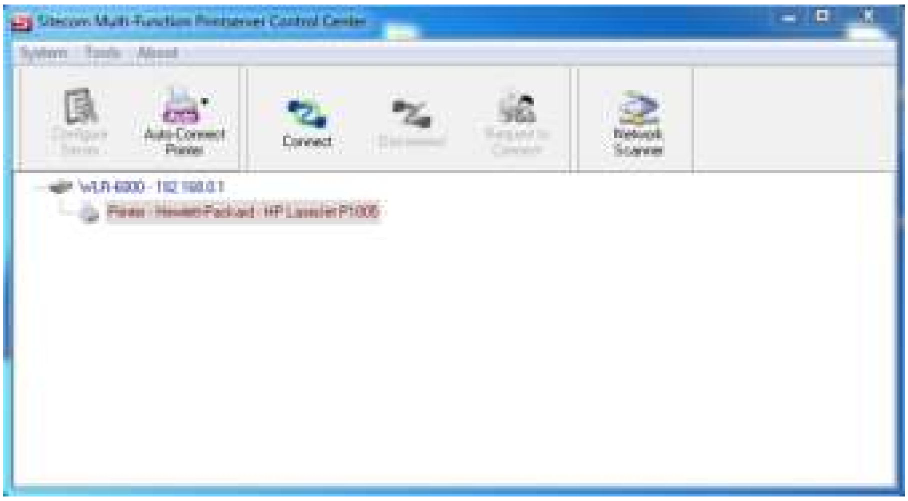
NetUSB installation

The steps to do installation for USB devices, like MFPs:

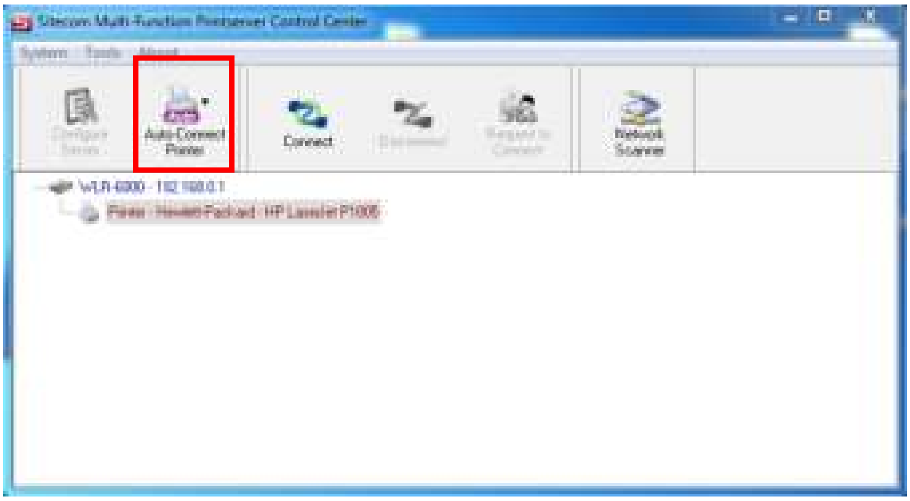
- Make sure the router is turned on.
- Connect the USB device to the USB port of the router.
- Run the Control Center. In the "USB MFP Server List" window, you can see the host names and IP addresses all of the Sitecom servers (in blue) on the network, as shown below.



- Click the server. Then all USB devices attached to the server will be shown.



- Please follow the user manual of the USB device to install its driver. For example, you may put the driver CD of the USB device in the CD-ROM player to install the driver.
- When you are asked to plug in the USB device into PC's USB port, click the desired USB device in the Control Center and then click the "Auto-Connect Printer" button to do the connect operation and get the ownership of the USB device. The computer name of the device owner will be shown at the end of the device.



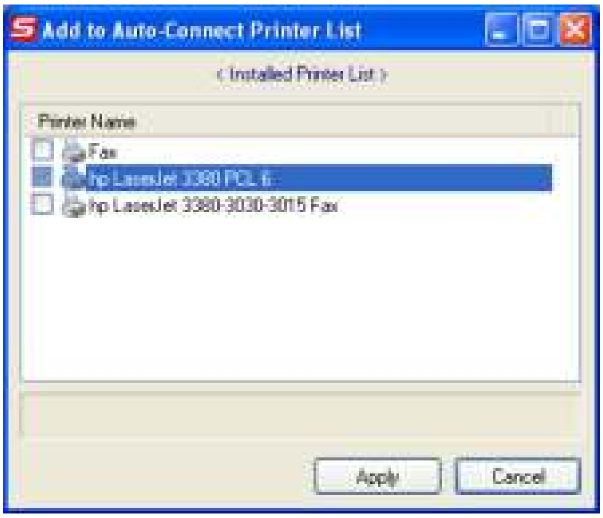
- PC will automatically detect that the USB device is plugged-in. On the right side of the Windows Task Bar, you can see the information of the new device. Continue to follow the user manual of the USB device to do the rest jobs of installation, until the driver installation has finished.

After the installation, you can see the newly created devices on the PC. If the USB device is a MFP, you can see a new printer and a new scanner from the "Control Panel".

NetUSB Printing using Auto-Connect Printer

After the driver is installed, you can see a newly created printer in the Control Panel. Follow the steps below to perform NetUSB printing.

- In the Control Center, click the MFP server that has the desired printer (or MFP) attached.
- Click the desired printer (or MFP).
- Click the "Auto Connect Printer" button and choose "Set Auto-Connect Printer". The following figure will appear.



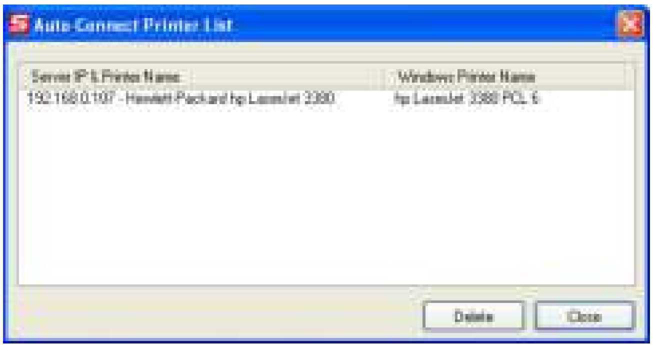
Add to Auto-Connect Printer List

< Installed Printer List >

Printer Name

- ☐ Fax
- ☑ hp LaserJet 3380 PCL 6
- ☐ hp LaserJet 3380-3030-3015 Fax

- Choose the desired printer. The desired printer must be the Windows printer (this is a logical printer) that matches the printer attached on the MFP server (this is a physical printer). Then click the "**Apply**" button.



Auto Connect Printer List

Server IP & Printer Name	Windows Printer Name
192.168.0.107 - Hewlett-Packard hp LaserJet 3380	hp LaserJet 3380 PCL 6

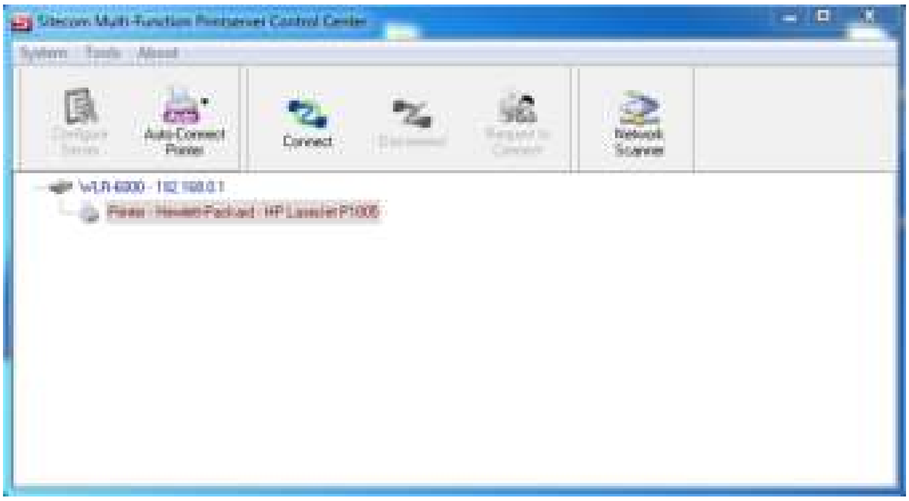
- Then, the printer will be marked as an "Auto-Connected Printer" in red. If you choose "Auto-Connected Printer List" in the "Tools" menu, you can see a newly created item that describes the association between the Windows printer and the physical printer on the server.
- Then try to issue a print job to the desired printer. You will see the Control Center will automatically do a connect operation and, once the print job finished, it will hold the connection. However, the connection will be released immediately when another user do the printing afterward. At the same time, the printer is automatically disconnected with your PC.

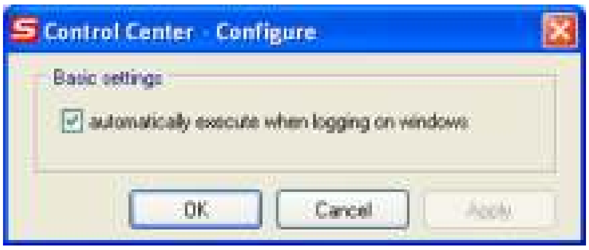
- When you do a print job again. The control center will automatically do a connecting operation on printing again. This is so-called "Auto Connect / Disconnect" operation.

Note: Under the "Auto-Connected Printer" setting, it is not necessary to manually press the "**Connect**" button when printing. If you press the "Connect" button for printing, please make sure to click "**Disconnect**" button after you finish the printing. Otherwise, other users cannot print properly. It is because you are the only ownership of the connected printer.

AutoRun

You can make the Control Center be run automatically after you login Windows. To do this, you choose the "Configuration" item in the "Tools" menu. The following window will appear. Click the check box and then on the "OK" button. This feature is enabled by default.

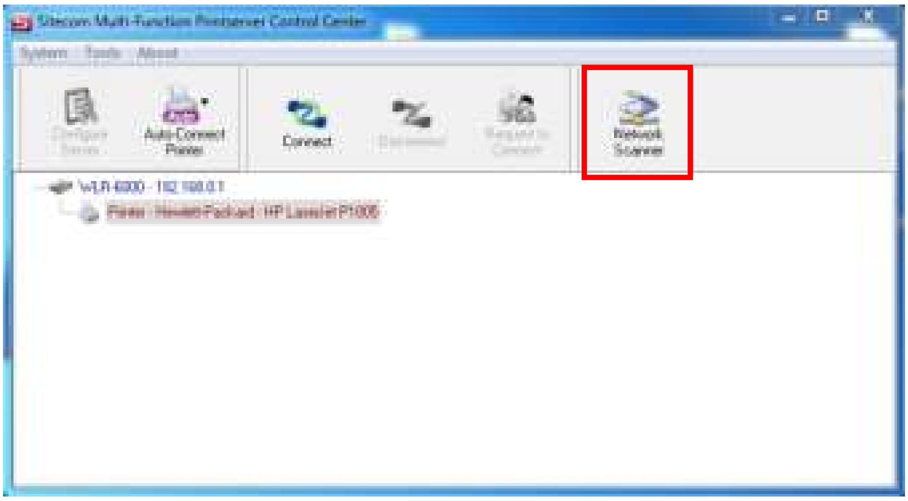




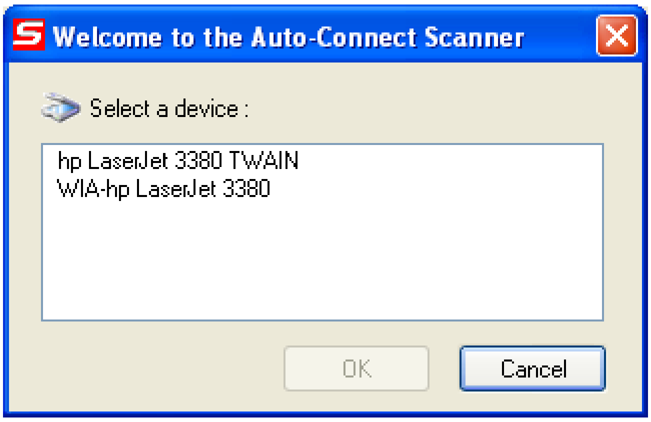
☑ automatically execute when logging on windows

NetUSB Scanning using Network Scanning

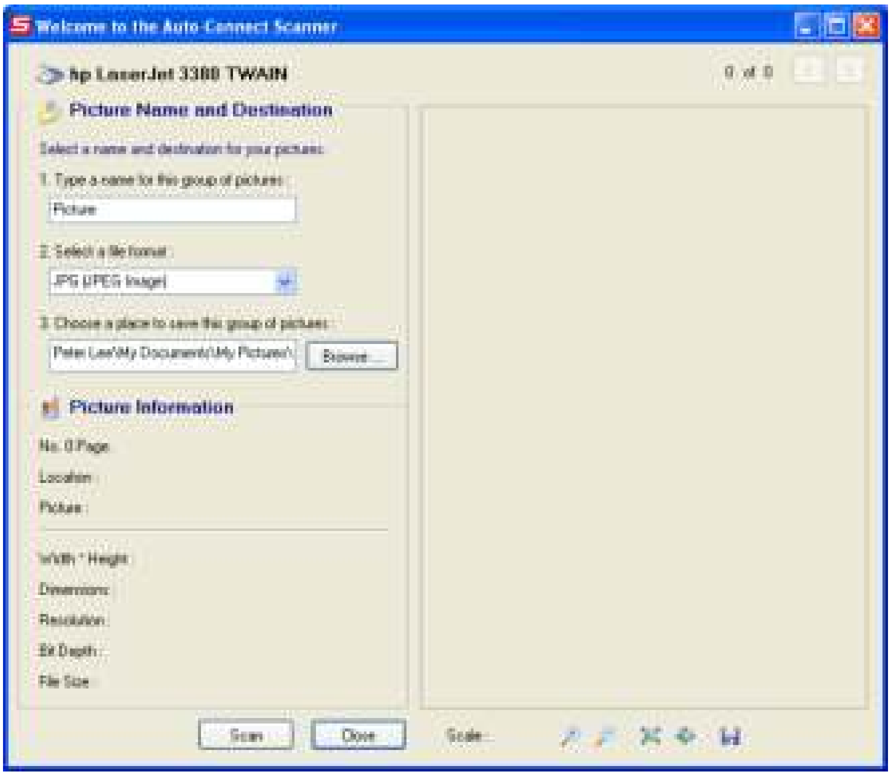
- In the Control Center, click the MFP server that has the desired MFP attached.
- Click the desired MFP.
- Click the “Network Scanner” button.



- Then you can see that the Control Center will automatically do a “connect” operation. The following window will appear.



- Choose one of TWAIN or WIA item. Click “OK”. The following window will appear.



Welcome to the Auto Connect Scanner

hp LaserJet 3380 TWAIN

Picture Name and Destination

Select a name and destination for your pictures:

1. Type a name for this group of pictures:

Picture

2. Select a file format:

JPG (JPEG Image)

3. Choose a place to save this group of pictures:

Peter Lee\My Documents\My Pictures\

Picture Information

No. 0 Page

Location :

Picture :

Width * Height :

Dimensions :

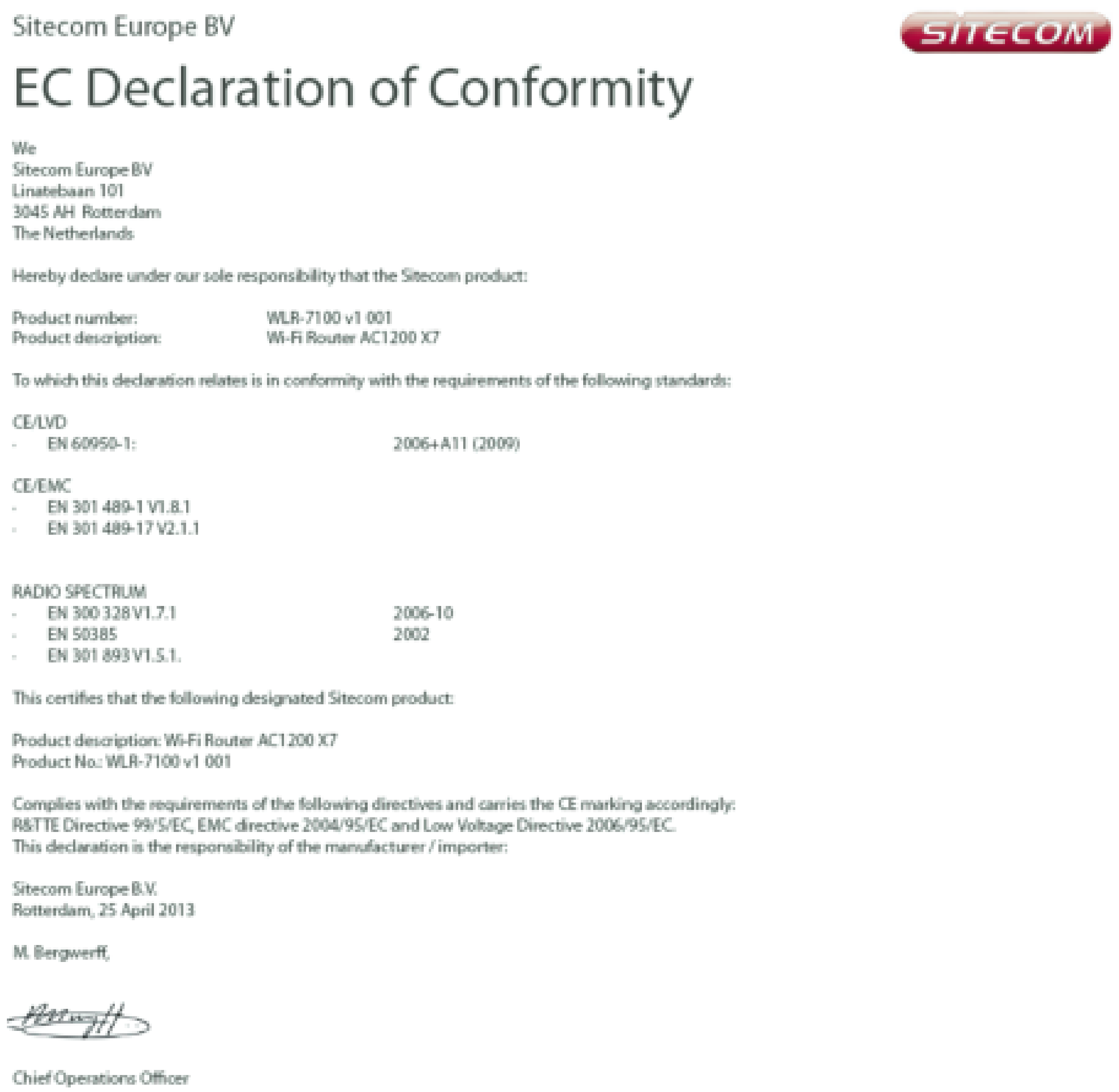
Resolution :

Bit Depth :

File Size :

- Follow the usual steps to do scanning.

Addendum B: Declaration of Conformity



Sitecom Europe BV

EC Declaration of Conformity

We
Sitecom Europe BV
Linatebaan 101
3045 AH Rotterdam
The Netherlands

Hereby declare under our sole responsibility that the Sitecom product:

Product number:	WLR-7100 v1 001
Product description:	Wi-Fi Router AC1200 X7

To which this declaration relates is in conformity with the requirements of the following standards:

CE/LVD

- EN 60950-1:	2006+A11 (2009)

CE/EMC

- EN 301 489-1 V1.8.1
- EN 301 489-17 V2.1.1

RADIO SPECTRUM

- EN 300 328 V1.7.1	2006-10
- EN 50385	2002
- EN 301 893 V1.5.1.	

This certifies that the following designated Sitecom product:

Product description: Wi-Fi Router AC1200 X7
Product No.: WLR-7100 v1 001

Complies with the requirements of the following directives and carries the CE marking accordingly:
R&TTE Directive 99/5/EC, EMC directive 2004/95/EC and Low Voltage Directive 2006/95/EC.
This declaration is the responsibility of the manufacturer / importer:

Sitecom Europe B.V.
Rotterdam, 25 April 2013

M. Bergwerff,

Chief Operations Officer

SITECOM

UK CE COMPLIANCE

Hereby Sitecom Europe BV declares that this product is in accordance with essential requirements and other relevant terms of the European regulation 1999/5/EC.

FR CONFORMITE CE

Par la présente Sitecom Europe BV, déclare que l'appareil est conforme aux exigences essentielles et aux dispositions pertinentes de la Directive Européenne 1999/5/EC.

DE CE-CONFORMITÄT

Hiermit erklärt Sitecom Europe BV, dass dieses Produkt die erforderlichen Voraussetzungen und andere relevante Konditionen der europäischen Richtlinie 1999/5/EC erfüllt.

IT CONFORMITA ALLE NORME CE

Con la presente Sitecom Europe BV dichiara che questo prodotto è conforme ai requisiti essenziali e agli altri termini rilevanti della Direttiva Europea 1999/5/EC.

NL CE GOEDKEURING

Hierbij verklaart Sitecom Europe BV dat dit product in overeenstemming is met de essentiële eisen en andere relevante bepalingen van Europese Richtlijn 1999/5/EC.

ES CONFORMIDAD CON LA CE

Por la presente Sitecom Europe BV declara que este producto cumple con los requisitos esenciales y las otras provisiones relevantes de la Directiva Europea 1999/5/EC.

PT CONFORMIDADE CE

Pela presente a Sitecom Europe BV declara que este produto está em conformidade com os requisitos essenciais e outras condições relevantes da regulamentação Europeia 1999/5/EC.

SE CE-FÖRSÄKRAN

Härmed försäkrar Sitecom Europe BV att denna produkt uppfyller de nödvändiga kraven och andra relevanta villkor EU-direktivet 1999/5/EC.

DK OVERENSSTEMMELSESERKLÆRING

Sitecom Europe BV bekræfter hermed, at dette produkt er i overensstemmelse med væsentlige krav og andre betingelser i henhold til Rådets direktiv 1999/5/EC.

NO CE-OVERENSSTEMMELSE

Sitecom Europe BV erklærer herved at dette produktet er i overensstemmelse med de avgjørende kravene og andre relevante vilkår i den europeiske forskriften 1999/5/EC.

FI CE-HYVÄKSYNTÄ

Täten Sitecom Europe BV ilmoittaa, että tämä tuote on yhdenmukainen direktiivin 1999/5/EC olennaisten vaatimusten ja muiden asiaankuuluvien sopimusehtojen kanssa.

RU СООТВЕТСТВИЕ ТРЕБОВАНИЯМ CE

Настоящим компания Sitecom Europe BV заявляет, что ее продукция соответствует основным требованиям и условиям Европейской Директивы 1999/5/EC.

PL CERTYFIKAT ZGODNOŚCI CE

Sitecom Europe BV niniejszym oświadcza, że ten produkt spełnia wszelkie niezbędne wymogi, a także inne istotne warunki dyrektywy europejskiej 1999/5/WE.

GR ΣΥΜΜΟΡΦΩΣΗ ΜΕ CE

Η Sitecom Europe BV δηλώνει, διά του παρόντος, ότι αυτό το προϊόν συμμορφώνεται με τις ουσιώδεις απαιτήσεις και τους λοιπούς όρους του ευρωπαϊκού κανονισμού 1999/5/EC.

RoHS compliant

This product may be used in the following countries:

AT BE HU CZ IT RO EE ES
FI FR IS NL GR CY IE DK
LT LU LV MT GB SI TR PT
SE SK PL DE CH BG NO LI

For non EU countries please check with the local authorities for restrictions of using wireless products