

SmartHub



Dual Band 802.11 a/b/g/n Wireless Router Model AWRT-600N

User's Manual

Rev. 1.0

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1. Introduction

Thank you for purchasing Asante AWRT-600N Smart Dual Band Wireless N Router. The AWRT-600N Dual Band Wireless N Router provides switchable 2.4 and 5 GHz wireless frequency which allow more clean channels and less interference for your wireless network. A full range of security features such as WPA2-PSK, WPA-PSK, and WEP provide the highest level of wireless network security. The built-in SmartHub Web Configuration Utility has a unique 'Easy Set up' option that allows one to set up the router with no or minimum networking knowledge. The built-in Web Configuration Utility also has the regular path to set up the router with an easy-to-use user interface.

SmartHub is to change user's access the router in a very innovative way where administrator can

- 1) access the device simply by bring up a browser and login accordingly
- 2) create/modify/delete user profile and manage it in any place and any time.
- 3) Setup the internet and wireless seamlessly to any ISP.

1.1 Package Contents

Before you begin the installation, please check the items of your package:

- Dual Band Wireless N Router
- Power Adapter
- □ Ethernet Cable (Cat.5)
- Manual CD
- □ Quick Installation Guide

If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packaging materials in case you need to ship the unit in the future.

1.2 Features

- Smart Setup, Management, Control.
- Built-in dual band (5 / 2.4GHz switchable) AP
- More channels, less interference ideal for wireless congested area
- Highest wireless data rate of up to 300Mbps* with 802.11n draft 2.0
- WPS button for easy connection with your WPS support wireless adapters
- Enjoy HD video streaming, gaming and VoIP with more powerful Dual Band Wireless N
- Advanced NAT+SPI firewall provides fully protection for your wireless connection
- QoS (Quality of Service) designed for prioritizing various data traffic to allow downloading files and playing movies, music, or online gaming at the same time with uninterrupted data streaming
- Supports Universal Plug and Play
- Fully backward compatible with 802.11a/b/g

2. Connecting the Router

Note: Prior to connecting the router, be sure to power off your computer, DSL/Cable modem, and the router.

Step 1 Connect one end of a network cable to the **INTERNET(yellow)** port of the router and connect the other end of the cable to the DSL/Cable modem.

Step 2 With another network cable, connect one end of the cable to your computer's Ethernet port and connect the other end to one of the **LAN** ports of the router.

Step 3 Power on the DSL/Cable modem and wait for the lights on the modem to become stable.

Step 4 Plug the power adapter to the router and connect to an outlet or power strip.

Step 5 Power on your computer.

Step 6 Make sure the **INTERNET**, **WIRELESS**, and the **LAN** port that the computer is connected to are lit. If not, try the above steps again.

LED Indicators:



How the router connects:



3. Configuring the Router

After all components in the previous picture are connected and powered up, follow the steps below to configure the router.

Step 1 Open the web browser (Internet Explorer/Mozilla Firefox/Safari/Chrome). If this is the first time, the logon page below should appear. Or you can type "smarthub" or "192.168.1.1" on the browser.

Asante			SmartHub AWRT-BOON
	1 st Time	to SmartH	ub
	You will be the 1st ac	Iministratior.	
	Administrator :	admin	Default admin - you may change it
	Password :		Create your password
	Re-type Password :		
	Sav	ve & Enter	

Otherwise the regular user page below will appear below after 1st administrator created the user profile.

Asante		SmartHub AWRT-600N
	Welcome to SmartHub	
	Username :	
	Password :	
	Enter	

Step 2 Enter **admin** for both the username and password fields and click **OK**. The page below should appear.

Asante



Hi, Administrator



The sections below cover the 'Advanced Set Up' option. The 'Easy Set Up' will automatically guide you accordingly with online help menu. It is very simple and straightforward set up procedure which will not describe in this manual.

The Cable Modem

For most cable modem users, you should be able to connect to the Internet without any configuration. Automatic Configuration – DHCP is usually the default Internet Connection Type. If your ISP has provided you with a host name, enter it in the optional **Host Name** field. Click **Save Settings** to save the settings.

🕅 Asar	nte		2	AWRT-600N
EZ Set Up		Basic Setup DDNS	MAC Address Clone Advanced Routing	
Setup	Internet Setup			
Status	Internet Connection Type	Automatic Configuration	n - DHCP 😪	Help Explain
Wireless	Optional Settings (required by some	Host Name:	Asante	
Firewall	Internet Service Providers)	Domain Name: MTU:	Asante Size: 1500	
Access Policy		-		
Application	Network Setup	IP Address:	192 . 168 . 1 . 1	
Administration	Router IP	Subnet Mask :	255.255.255.0	
	DHCP Server Setting	DHCP Server :	Enabled Disabled DHCP Reservation	-
		Start IP Address :	192 . 168 . 1 . 100	
		Maximum Number of Users :	50	
		IP Address Range :	192 168 1 100 to 149	

If your ISP requires a registered MAC Address, click on the **MAC Address Clone** tab select **Enabled**, and click on the **Clone My PC's MAC** button. Click **Save Settings** to save the settings.

🕅 Asar	nte			SmartHub AWRT-600N	
EZ Set Up		Basic Setup DI	DNS MAC Address Clone Advanced Routing		
Setup	MAC Address Clone				
Status		• Enabled O Dis	sabled	Help Explain	r
Wireless		MAC Address:	00 _ 21 _ 00 _ 78 _ 4C _ 9D		
Firewall			Clone My PC's MAC		
Access Policy					
Application					
Administration					
			Save Settings Cancel	Changes	

If you have trouble connecting to the Internet, please refer to **Section 4**, **Verifying** Connection.

DSL

For DSL users, follow the steps below to configure the router.

Step 1 Select **PPPoE** from the drop-down menu.

Asar 🕅	ite			SmartHub AWRT-600N
EZ Set Up		Basic Setup DDN:	S MAC Address Clone Advanced Routing	
Setup	Internet Setup			
20 - B	Internet Connection	PPPoE	~	Help
Status	Туре	Automatic Configurat	tion - DHCP	Explain
		Static IP PPPoE		
Wireless		PPTP L2TP		
Firewall		Telstra Cable	a 10-	
Thewan		Service Name(Option		
Access Policy			and:Max Idle Time 5 Minutes.	
е. ,		Keep Alive: Redi	al Period 30 Seconds.	
Application				
A design and the second				
Administration	Optional Settings	Host Name:	Asante	
	(required by some Internet Service	Domain Name :	Asante	
	Providers)	MTU :	Auto 💉 Size: 1492	

Step 2 Enter your username and password provided by your ISP.

Asante 2

				AWRT-600N
EZ Set Up		Basic Setup DDNS	S MAC Address Clone Advanced Routing	
Setup	Internet Setup			
Status	Internet Connection Type	PPPoE		Help Explain
Wireless		Username : Password:		
Firewall		Service Name(Optiona	al):	
Access Policy		 Connect on Dema Keep Alive: Redia 	and:Max Idle Time 5 Minutes. al Period 30 Seconds.	
Application		·		
Administration	Optional Settings	Host Name:	Asante	
	(required by some Internet Service	Domain Name :	Asante	
	Providers)	МΤU:	Auto Size: 1492	
	Network Setup	3		

SmartHub

Note: Depending on the ISP, you may need to include the domain name with your username.

Example: username@sbcglobal.net

Step 3 Click Save Settings to save the settings.

You should be able to connect to the Internet now with the wired computer. If you have trouble connecting to the Internet, please refer to **Section 4**, **Verifying Connection**.

Connect each of your wired computers to an available LAN port on the Router with an Ethernet cable, and then restart the computer. These computers should be able to connect to the Internet immediately.

4. Verifying Connection

If you have trouble connecting to the Internet, try the following steps.

Step 1 Power off the Cable/DSL modem, router, and computer and wait for 5 minutes.

Step 2 Turn on the Cable/DSL modem and wait for the lights on the modem to settle down.

Step 3 Turn on the router and wait for the lights on the router to settle down.

Step 4 Turn on the computer.

Asante

Step 5 Log in to the router and select the Status tab.

Step 6 Verify that the **Internet IP Address**, **Default Gateway**, and at least one of the **DNS** fields have valid numbers assigned to them (instead of all 0's).

				AWATHOODIA
EZ Set Up		Router Local Netwo	rk Wireless Network	
Setup	Router Information	Firmware Version:	1.0.01	
Status		S/N	1234567890	Help Explain
Wireless		Current Time: Internet MAC Address:	Thu Nov 19 03:56:30 2009 (GMT -08:00) 00:21:00:78:4C:9D	
Firewall		Host Name:	Asante	
Access Policy		Domain Name:	Asante	
Application	Internet Connection	Connection Type: Internet IP Address	Automatic Configuration - DHCP 0.0.0.0	
Administration		Subnet Mask	0.0.0.0	
		Default Gateway	0.0.0.0	
		мти	Auto	
			IP Address Release IP Address Renew	
			Refresh	

SmartH

If each field has a valid numbers(not all 0's) assigned, the router is connected to the Internet.

5. Connecting to the Router Wirelessly

Below are the default wireless settings of the router. You must configure your wireless network card to the same settings in order to establish a wireless connection to the router. Please refer to your wireless network card's manual on how to configure these settings.

SSID: default Network Mode: BGN-Mixed Authentication: Open System Channel #: 6 WEP: disabled

If you want to change the router's wireless and security settings, log in to the router and select the **Wireless** tab. Click on **Manual** button. Click **Save Settings** to save the settings after you make changes.



6. Web Configuration Utility

This router has a built-in web configuration utility that you can use to configure the router's settings. Simply log in to the router using your computer's web browser.

6.1 Setup

6.1.1 Setup > Basic Setup

This is the default screen when you log in to the router's web configuration utility and select 'Advanced Set Up'. You can setup your Internet connection here as well as configuring the Network and DHCP server settings and selecting your Time Zone.

7 Asa	nte		Si	AWRT-600N
EZ Set Up		Basic Betup DDNS	IIIAC Address Clone Advanced Routing	
Setup	Internet Setup			
	Internet Connection	Static IP	~	Help
Status	Туре			Explain
	Optional Settings (required by some	Host Name:	Asainte	
Wireless	Internet Service Providers)	Domain Name:	Asante	
Firewall		MTU:	Auto Size: 1500	
Access Polloy	Network Setup			
-	Router IP	IP Address	192 188 1 1	
Application		Subnet Mask		
Administration		Bubliet MESK :	255 255 255 0	
	DHOP Server Setting	-		_
		OHOP Server :	Enabled Disabled [DHCP Reservation]	
		Start IP Address :	192 168 1 100	
		Maximum Number of Users :	50	
		IP Address Range :	192 . 165 . 1 100 to 149	
		Client Lease Time :	0 minutes (0 means one day)	
		DNS :		
		WINS :		
	Time Bettings			
	Time Zone	(GI/IT-08:00) Pacific Tir	me (USA & Canada)	
		Automatically adjust	st clock for daylight saving changes.	
			Eave Bollings Cancel Changes	
			2	

Internet Setup

There are six Internet Connection Types: DHCP, PPPoE, Static IP, PPTP, L2TP, and Telstra Cable.

Automatic Configuration - DHCP

When your ISP provides dynamic IP, you can keep this default setting (This is for most cable modem users). Usually you should be able to connect to the Internet without changing any configuration. If your ISP has provided you with a host name, enter it in the optional Host Name field. Click Save Settings to save the settings. SmartHub

Asante 7

EZ Set Up		Basic Setup DDNS	S MAC Address Clone Advanced Routing	
Setup	Internet Setup			
Status	Туре	Automatic Configural	tion - DHCP M	Help Explain
Wireless	Optional Settings (required by some	Host Name:	Asante	
Firewall	Internet Service Providers)	Domain Name: MTU:	Asante Auto Size: 1500	
Access Policy				
Application	Network Setup Router IP	IP Address: Subnet Mask :	192 . 168 . 1 . 1 255.255.255.0	
Administration		Sublict liden :	233.233.233.0	

PPPoE

Usually DSL service provider uses PPPoE for Internet connection. You will need to provide username and password given by your ISP to connect to the Internet.

% Asar	nte			SmartHub
EZ Set Up		Basic Setup DDNS	MAC Address Clone Advanced Routing	
Setup	Internet Setup			
Status	Internet Connection Type	PPPoE		Help Explain
Wireless		Username :		
Firewall		Password: Service Name(Optiona	1):	
Access Policy		 Connect on Dema Keep Alive: Redia 	and a second sec	
Application				
Administration	Optional Settings	Host Name:	Asante	
	(required by some Internet Service Providers)	Domain Name :	Asante	
	(Torocia)	MTU :	Auto Y Size: 1492	

Static IP

Select Static IP if your ISP provided you the static IP address, Subnet Mask, Default Gateway and DNS server addresses for Internet connection.

Asar	nte		Si	AWRT-600N
EZ Set Up		Basic Setup DDNS	MAC Address Clone Advanced Routing	
Setup	Internet Setup			
Status	Internet Connection Type	Static IP		Help Explain
Wireless		Internet IP Address:	192 . 168 . 1 . 122	
Firewall		Subnet Mask: Default Gateway:	255 . 255 . 0 192 . 168 . 1 .	
Access Policy		DNS 1: DNS 2(Options):	61 . 31 . 233 . 1 211 . 78 . 215 . 137	
Application		DNS 2(Options):	211, 78, 215, 200	
Administration				
	Optional Settings	Host Name:	Asante	
	(required by some Internet Service	Domain Name:	Asante	
	Providers)	MTU:	Auto 💌 Size: 1500	
		2		

PPTP

Point-to-Point Tunneling Protocol (PPTP) is a service that applies to connections in Europe only. Enter the Internet connection information provided by your ISP accordingly.

SmartHub AWRT-600N

Asante 🕅

EZ Set Up		Basic Setup DDNS MAC Address Clone Advanced Routing	
Setup	Internet Setup		
Status	Internet Connection Type	рртр	Help Explain
Wireless		Obtain an IP Address Automatically.	
Firewall		Specify an IP O	
Access Policy		Default Gateway 0 0 0 0 0 Address: 0 0 0 0 0 0 0	
Application		DNS: 0.0.0.0	
Administration		Server IP Address: 0 0 0 0 Username:	
		Password: Connect on Demand:Max Idle Time 5 Minutes.	
			-
	Optional Settings (required by some	Host Name: Asante	

L2TP

L2TP is a service that applies to connections in Israel only. Enter the Internet connection information provided by your ISP accordingly.

Asan	te			SmartHub AWRT-600N
EZ Set Up		Basic Setup DDN	S MAC Address Clone Advanced Routing	
Setup	Internet Setup			
Status	Internet Connection Type	L2TP		Help Explain
Wireless		Internet IP Address : Username:	0,0,0,0	
Firewall		Password:		
Access Policy		 Connect on Dem Keep Alive:Redia 		
Application		-		
Administration	Optional Settings (required by some	Host Name:	Asante	

Telstra Cable

Telstra Cable is a service that applies to connections in Australia only. Enter the Internet connection information provided by your ISP accordingly.

% Asar	ite			SmartHub AWRT-600N
EZ Set Up		Basic Setup DDNS	MAC Address Clone Advanced Routing	
Setup	Internet Setup			
Status	Internet Connection Type	Telstra Cable	×	Help Explain
Wireless		Internet IP Address :	0,0,0,0	
Firewall		Username: Password:		
Access Policy		 Connect on Demar Keep Alive:Redial 	nd:Max Idle Time 5 Minutes. Period 30 Seconds.	
Application				
Administration	Optional Settings	Host Name:	Asante	
	(required by some Internet Service	Domain Name :	Asante	
	Providers)	МТU :	Auto 💙 Size: 1500	

Network Setup

Router IP

You can change the Router's IP Address and its Subnet Mask for the local network.

Network Setup		
Router IP	IP Address:	192 . 168 . 1 . 1
	Subnet Mask :	255.255.255.0

The Router has a built-in DHCP server which can dynamically assign IP address to each device on your network. The **DHCP Server** is **Enabled** by default, if you already have a DHCP server on the network, you need to select **Disabled**.

CP Server Setting	DHCP Server :	Enabled Disabled DHCP Reservation
	Start IP Address :	192 . 168 . 1 . 100
	Maximum Number of Users :	50
	IP Address Range :	192 . 168 . 1 . 100 to 149
	Client Lease Time :	0 minutes (0 means one day)
	DNS :	0.0.0
	WINS :	

Start IP Address: Give a value for the dynamically assigning IP address to start with. Because the Router's default IP address is **192.168.1.1**, the Starting IP Address must be 192.168.1.2 or greater, but smaller than 192.168.1.253. The default Starting IP Address is **192.168.1.100**.

Maximum Number of Users: Enter the maximum number of PCs that you want the DHCP server to assign IP addresses to. This number cannot be greater than 253. The default is **50**.

Client Lease Time: The Client Lease Time is the amount of time a network user will be allowed connection to the Router with their current dynamic IP address. The default is 24 hours.

Static DNS 1~3: Enter up to 3 DNS addresses for your network.

DHCP Reservation: If you want to assign a static IP Address to one of the computers in your network, click on the **DHCP Reservation** button.

A sante								
DHCP Reservation Select Client from								
DHCP Tables	Client Name	•	Interface	IP A	ddress	MAC Addr	ess	Select
	Katie_Tung-NB	01	Wireless	192.1	68.1.102	00:17:C4:93	38:22	
							Add	Clients
Manually Add Client	Enter Client Nan	ne	Assign IP Add	ress	To This	MAC Addres	s	
			192.168.1. 0		00:00:0	0:00:00:00		Add
Clients Already Reserved								
	Client Name		Assign this IP	Т	o This MA	C Address	MAC	Address
	Save Settings	Car	icel Changes	Re	fresh	Close	•	

Step 1 Enter the Static IP Address in the Assign this IP field.

Step 2 Enter the MAC address of the corresponding computer in the To this MAC field.

Step 3 Check the Add button.

Step 4 Click Save Settings.

Time Settings

Set up the time zone and daylight saving for the Router.

|--|

6.1.2 Setup > DDNS

Dynamic DNS (DDNS) allows any user who wishes to access your server to reach it by a registered DNS name instead of an IP address. Before you enable **DDNS**, you need to register an account with one of the DDNS providers listed in the drop-down menu.



To Enable DDNS, select the DDNS provider you have registered with and enter the required fields. Click **Save Settings** to save the settings.

6.1.3 Setup > MAC Address Clone

Some ISPs require a registered MAC address to access the Internet. You can use the following steps to clone your PC's registered MAC address to access the Internet.

Asa	nte				rtHub T-600N
EZ Set Up		Basic Setup DI	DNS MAC Address Clone Advanced Routing		
Setup	MAC Address Clone				Help
Status		● Enabled ○ Dis	sabled		Explain
Wireless		MAC Address:	00 . 21 . 00 . 78 . 4C . 9D		
Firewall			Clone My PC's MAC		
Access Policy					
Application					
Administration			Four Pattings Control	Changes	
			Save Settings Cancel	Certaingless	

. .

Step 1 Check the radio button Enabled .

- Step 2 Click the Clone My PC's MAC button.
- Step 3 Click Save Settings to save the settings.

6.1.4 Setup > Advanced Routing

Asante 🕅

EZ Set Up		Basic Setup DDNS MA(C Address Clone Advanced Routing	
Setup	Advanced Routing			
Status	NAT	Inabled O Disabled		H Ex
Wireless		2		
Firewall	Dynamic Routing (RIP)	O Enabled 💿 Disabled		
Access Policy	Static Routing	Route Entries:	1 () V Delete This Entry	
Application		Enter Route Name:		
Administration		Subnet Mask:		
		Gateway:	0.0.0.0	
		Interface:	LAN & Wireless 💌	
		Show Routing Table		
			Save Settings Cancel Char	iges

SmartHu AWRT-600N

To see the current routing table, click on **Show Routing Table** button.

Be sure to click **Save Settings** to save each entry.

6.2. Wireless

6.2.1 Wireless > Basic Wireless Settings

Asan	te				Sma	RT-600N
EZ Set Up		Basic Wireless Settings Wirel	less Security W	/ireless MAC Filter Advan	ced Wireless Settings	
Setup	Basic Wireless					Help
Status	Settings	Wireless Configuration:	O Manual	Wi-Fi Protected Setur		Explain
Wireless		Wi-Fi Protected Setup				
Firewall		Please check if your PC has sync up with Smarthub.:	WPS button. If y	ves, there are 2 options.	That you can easily	
Access Policy						
Application		1. If your PC has WPS button.P	Please click it and p	rress below WPS		
Administration		2. If your PC has WPS PIN num	ber,Please enter n	umber here	Enter	
		Wi-Fi Protected Setup Status	s:	Configured		
		Network Name (SSID):		SmartHub-AWRT600N		
		Security:		Disabled		

Wireless Configuration - Manual

To configure the Wireless settings, click radio button Manual.

You can configure the router's basic wireless settings on this screen.

EZ Set Up Basic Wireless Settings Wireless Security Wireless MAC Filter Advanced Wireless Settings	
Setup Basic Wireless	
Status Status Wireless Configuration:	
Wireless Network Name (SSID): BGN-Mixed Metwork Name (SSID): SmartHub-AWRT600N	
Firewall Radio Band: Auto - 20/40MHz Channel 😪	
Access Policy Extension Channel: Auto	
Application SSID Broadcast:	
Administration	
Save Settings Cancel Changes	

Network Mode: If you have 802.11b/g/n 2.4GHz devices on the wireless network, select **BGN-Mixed**. If you have 802.11a/n 5GHz devices on the wireless network, select **AN-Mixed**.

Note: If your wireless computer cannot detect the router after you selected AN-Mixed, please make sure your wireless adapter supports 5GHz frequency band.

Network Name (SSID): You can change the router's SSID in this field. Once you have changed the SSID, your network clients need to re-connect themselves using the new SSID.

Channel: Select the desired channel. All the network clients need to use the same channel.

Radio Band: For best performance in a network, keep the default, Auto – 20/40MHz Channel.

Standard Channel: If you selected Auto – 20/40MHz Channel for the Radio Band setting, then this setting will be your primary Wireless N channel. If you are not sure which channel to select, keep the default, Auto.

Extension Channel: Select the extension channel for Wireless N extended radio band.

If you are not sure which channel to select, keep the default, Auto.

SSID Broadcast: Choose to enable or disable the broadcast of your SSID (wireless network name).

6.2.2 Wireless > Wireless Security

You can configure wireless security such as WPA2 or WEP encryption on this screen.

Note: WPA2 Personal is the most secured encryption mode for general users. WEP is the most common encryption but the least secured. It is recommended to use WPA2 Personal AES for your wireless security if all the wireless devices on your network support this mode. All of the wireless clients must use the same security settings in order to connect to the router.

WEP

To enable WEP, select **WEP** from the **Security Mode**.

Asan	te					RT-600N
EZ Set Up		Basic Wireless Set	tings Wireless Security	Wireless MAC Filter Ad	vanced Wireless Settings	
Setup	Wireless Security					
Status		Security Mode:	WEP			Help Explain
Wireless			40 / 64-bit (10 hex digits)	×		
Firewall		Encryption: Passphrase:	40764-bit (To nex bigits)	Generate		
Access Policy		Key 1:				
Application		Key 2:				
Administration		Key 3: Key 4: TX Key:	1 💌			
				Save Settings	Cancel Changes	

Encryption: Choose 64 bits or 128 bits

Passphrase: You can enter a passphrase and click on the **Generate** button and the router will automatically generate four WEP keys for you.

WEP Key 1 – 4: Manually assign a passphrase for each key. If you selected **64 bits** encryption, enter **10** HEX characters (0-F) for each key. If you selected **128 bits** encryption, enter **26** HEX characters (0-F) for each key.

TX Key: Select a key to be the active key.

Click Save Settings to save the settings.

WPA Personal

Select WPA Personal from the Security Mode.

Asan	te					MartHub
EZ Set Up		Basic Wireless Settings	Wireless Security Wire	eless MAC Filter A	dvanced Wireless Settings	
Setup	Wireless Security					1/12
Status		Security Mode:	WPA Personal 🗸			Help Explain
Wireless			AES 💌			
Firewall		Encryption: Passphrase:	ALS Y			
Access Policy		Key Renewal:	3600 seconds			
Application						
Administration						
				Save Settings	Cancel Changes	

Encryption: Select either TKIP or AES as the encryption method.

Passphrase: Enter a passphrase between 8 to 63 characters long.

Key Renewal: Enter the desired key renewal time in seconds.

WPA2 Personal

Select WPA2 Personal from the Security Mode.

Asan	te					RT-600N
EZ Set Up		Basic Wireless Settings	Wireless Security Wire	eless MAC Filter Ad	vanced Wireless Settings	
Setup	Wireless Security					
Status		Security Mode:	WPA2 Personal 💙			Help Explain
Wireless			TKIP or AES 🗸			
Firewall		Encryption: Passphrase:	TRIP OF AES			
Access Policy		Key Renewal:	3600 seconds			
Application						
Administration						
				Save Settings	Cancel Changes	

Encryption: Select either TKIP or AES as the encryption method.

Passphrase: Enter a passphrase between 8 to 63 characters long.

Key Renewal: Enter the desired key renewal time in seconds.

WPA Enterprise

Select WPA Enterprise from the Security Mode.

🕅 Asan	te		Si	AWRT-600N
EZ Set Up		Basic Wireless Settings	Wireless Security Wireless MAC Filter Advanced Wireless Settings	1
Setup	Wireless Security			
Status		Security Mode:	WPA Enterprise	Help Explain
Wireless				
Firewall		Encryption: RADIUS Server:	0.0.0.0	
Access Policy		RADIUS Port:	1812	
Application		Shared Secret:	2200	
Administration		Key Renewal:	3600 seconds	
			Save Settings Cancel Changes	



RADIUS Server: Enter the IP Address of your RADIUS server.

RADIUS Port: Enter the port number of your RADIUS server.

Shared Secret: Enter the shared key.

Key Renewal: Enter the desired key renewal time in seconds.

WPA2 Enterprise

Select WPA2 Enterprise from the Security Mode.

Asan	te					rtHub
EZ Set Up		Basic Wireless Settings	Wireless Security Wire	eless MAC Filter Advar	iced Wireless Settings	
Setup	Wireless Security					
Status		Security Mode:	WPA2 Personal V			Help Explain
Wireless			TKIP or AES 💙		_	
Firewall		Encryption: Passphrase:	TRIP OF ALS			
Access Policy		Key Renewal:	3600 seconds			
Application						
Administration						
]	Save Settings	Cancel Changes	

Encryption: Select either **TKIP** or **AES** as the encryption method.

RADIUS Server: Enter the IP Address of your RADIUS server.

RADIUS Port: Enter the port number of your RADIUS server. Default is 1812.

Shared Secret: Enter the shared key.

Key Renewal: Enter the desired key renewal time in seconds.

Radius

This option features WEP used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the Router.)

EZ Set Up		Basic Wireless Settings	Wireless Security Wireless MAC Filter Advanced Wireless Settings	
Setup	Wireless Security			
Status		Security Mode:	RADIUS	Help Explain
Wireless				
Firewall		RADIUS Server: RADIUS Port:	0 . 0 . 0 . 0 1812	
Access Policy		Shared Secret:		
Application		<u>.</u>		
Administration		Encryption: Passphrase:	40 / 64-bit (10 hex digits) Generate	
		Key 1:		
		Key 2:		
		Key 3:		
		Key 4:		
		TX Key:	1 💌	
			Save Settings Cancel Changes	

Encryption Methods: Select either **TKIP** or **AES** as the encryption method.

RADIUS Server: Enter the IP Address of your RADIUS server.

RADIUS Port: Enter the port number of your RADIUS server.

Shared Secret: Enter the shared key.

Encryption: Select a level of WEP encryption, 64 bits 10 hex digits or 128 bits 26 hex digits. The default is 64 bits 10 hex digits.

Passphrase: Enter a Passphrase to automatically generate WEP keys. Then click **Generate**.

Key 1-4: If you did not enter a Passphrase, enter the WEP key(s) manually.

Tx Key: Select a key from the drop-down menu.

To use Wi-Fi Protected Setup, click on **WiFi-Protected Setup** radio button in '**Basic Wireless Settings**' page.

Asante 🕅		J. I.	RT-600N		
EZ Set Up	Basic Wireless Settings Wireless	s Security Wireless MAC Filter Advanced Wireless Settings			
Setup Basic Wireless			Usta		
Status Status	Wireless Configuration:	O Manual 💿 Wi-Fi Protected Setup	Help Explain		
Wireless	Wi-Fi Protected Setup				
Firewall	Please check if your PC has WPS button. If yes, there are 2 options. That you can easily sync up with Smarthub.:				
Access Policy					
Application	1. If your PC has WPS button.Plea				
Administration	2. If your PC has WPS PIN number	,Please enter number here Enter			
	Wi-Fi Protected Setup Status:	Configured			
	Network Name (SSID):	SmartHub-AWRT600N			
	Security:	Disabled			

WiFi Protected Setup supports two types of connection: Push Button Configuration (PBC) or Personal Identification Number (PIN).

If you choose to use **PBC** on your client device to connect to the router, click on the WPS software button

If you choose to use **PIN** on your client device, you need to enter the PIN number generated by the client device into the blank and click **Register**.

Connecting to the Router with WPS Push Button (Optional)

AWRT-600N Dual Band Wireless N Router supports hardware WiFi-Protected Setup (WPS) push button which allows you to connect your wireless computer with the router safely and easily. Your wireless adapter must support this feature as well. If not, you will need to set up the wireless security manually.

3 Wireless > MAC Filter

You can restrict certain wireless clients from accessing the router by specifying their MAC address and enabling access restriction.

7 Asa	nte					SmartHub AWRT-GOON
EZ Set Up		Basic Wirele Settings	iss Settings Wreless Sect	rity Wireless	MAC Filter Advanced Wile	tiess
Setup	Wireless MAC Filter	O Exchier	Olsabled			Help
Status	Access Restriction		t PCs listed below from acce	ssing the wirele	ss network :	Explain
Wreless			PCs listed below to access th			
ITTE CAS	MAC Address Filter List	C. Otheras	s crient List			
Firewall		MAC 1:	00.00.00.00.00.00	MAC 26	00-00-00-00-00	
Access Policy		MAC 2	00.00.00.00.00.00	MAC 27:	00 00 00 00 00 00 00	
		MAC 3	00.00.00.00.00.00	MAC 28	00 00 00 00 00 00 00	
Application		MAC 4	00.00.00.00.00	MAC 29	00 00 00 00 00 00 00	
		MAC 5	00.00.00.00.00.00	MAC 30:	00 00 00 00 00 00 00	
Administration		MAC 6:	00:00:00:00:00:00	MAC 31:	00 00 00 00 00 00	
		MAC 7:	00.00.00.00.00.00	MAC 32:	00.00.00.00.00.00	
		MAC 8	00-00-00-00-00	MAC 33	00 00 00 00 00 00	
		MAC 9	00.00.00.00.00.00	MAC 34	00 00 00 00 00 00 00	
		MAC 10:	00.00.00.00.00.00	MAC 35	00 00 00 00 00 00	
		MAC 11:	00:00:00:00:00:00	MAC 36	00-00-00-00-00	
		MAC 12	00:00:00:00:00:00	MAC 37	00-00-00-00-00	
		MAC 13:	00:00:00:00:00:00	MAC 38	00-00-00-00-00-00	
		MAC 14:	00:00:00:00:00:00	MAC 39	00.00.00.00.00.00	
		MAC 15:	00:00:00:00:00:00	MAC 40:	00-00-00-00-00-00	
		MAC 16:	00-00-00-00-00	MAC 41:	00-00-00-00-00-00	
		MAC 17:	00-00-00-00-00-00	MAC 42	00-00-00-00-00-00	
		MAC 18:	00-00-00-00-00-00	MAC 43:	00-00-00-00-00-00	
		MAC 19:	00:00:00:00:00:00	MAC 44:	00-00-00-00-00-00	
		MAC 20:	00:00:00:00:00:00	MAC 45	00-00-00-00-00	
		MAC 21:	00:00:00:00:00:00	MAC 46:	00 00 00 00 00 00 00	
		MAC 22	00.00.00.00.00.00	MAC 47:		
		MAC 23	00.00.00.00.00.00	MAC 48:		
		MAC 24:	00:00:00:00:00:00	MAC 49:		
		MAC 25	00:00:00:00:00:00	MAC 50:	00.00.00.00.00.00	

Select **Enabled** and choose whether the specified wireless clients will be prevented or permitted to access the wireless network. Enter their MAC address in the fields below and click **Save Settings** to save the settings.

6.2.4 Wireless > Advanced Wireless Settings

You can configure various advanced wireless settings on this screen.

A sar	nte			SmartHub AWRT-600N
EZ Set Up		Basic Wireless Settings Wireless Se	ecurity Wireless MAC Filter Advanced Wireless	Settings
Setup	Advanced Wireless			Usta
Status		AP Isolation:	O Enabled 💿 Disabled (Default: Disabled)	Help Explain
Wireless		Frame Burst:	Enabled O Disabled (Default: Enabled)	_
Firewall		Authentication Type:	Auto (Default: Auto)	
Access Policy		Basic Rate: Transmission Rate:	Default (Default: Default) Auto (Default:Auto)	
Application		N Transmission Rate: CTS Protection Mode:	Auto (Default:Auto)	
Administration			Auto (Default: Auto)	
		Beacon Interval:	100 (Default: 100, Milliseconds,Range: 20-	-999)
		DTIM Interval:	1 (Default: 1, Range: 1 - 255)	
		Fragmentation Threshold:	2346 (Default: 2346, Range: 256 - 2346)	
		RTS Threshold:	2347 (Default: 2347, Range: 0 - 2347)	
			Save Settings Cancel Changes	3

AP Isolation: This isolates all wireless clients and wireless devices on your network from each other. Wireless devices will be able to communicate with the Router but not with each other. To use this function, select **Enabled**.

Frame Burst: Frame Burst allows packet bursting which will increase overall network speed.

Authentication Type: The default is set to Auto, which allows either Open System or Shared Key authentication to be used. With **Open System** authentication, the sender and the recipient do NOT use a WEP key for authentication. With **Shared Key** authentication, the sender and recipient use a WEP key for authentication. **Basic Rate:** The Basic Rate setting is not one, but a series of rates at which the Router can transmit. (The Basic Rate is not the actual rate of data transmission. If you want to specify the Router's rate of data transmission, configure the Transmission Rate setting.)

Transmission Rate: The rate of data transmission should be set depending on the speed of your wireless network.

CTS Protection Mode: CTS (Clear-To-Send) Protection Mode should remain disabled unless you are having severe problems with your wireless products not being able to transmit to the Router in an environment with heavy latency wireless traffic. This function boosts the Router's ability to catch all wireless transmissions but will severely decrease performance.

Beacon Interval: A beacon is a packet broadcast by the Router to synchronize the wireless network.

DTIM Interval: This value, between 3 and 255, indicates the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the Router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. Its clients hear the beacons and awaken to receive the broadcast and multicast messages. The default value is **1**.

Fragmentation Threshold: This value specifies the maximum size for a packet before data is fragmented into multiple packets. If you experience a high packet error rate, you may slightly increase the Fragmentation Threshold. Setting the Fragmentation Threshold too low may result in poor network performance. Only minor reduction of the default value is recommended. In most cases, it should remain at its default value of **2346**.

RTS Threshold: Should you encounter inconsistent data flow, only minor reduction of the default value, **2347**, is recommended. If a network packet is smaller than the preset RTS threshold size, the RTS/CTS mechanism will not be enabled. The Router sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission. The RTS Threshold value should remain at its default value of **2347**.

6.3 Security

6.3.1 Security > Firewall

🕅 Asar	nte	Still.	RT-600N
EZ Set Up		Firewall	
Setup	SPI Firewall	SPI Firewall Protection:	
Status	Protection	Enabled O Disabled	Help Explain
Wireless	Internet Filter	Filter Anonymous Internet Requests	
Firewall		Filter Multicast Filter Internet NAT Redirection	
Access Policy		Filter IDENT (Port 113)	
Application	Web Filter	Proxy Java ActiveX Cookies	
Administration			
		Save Settings Cancel Changes	

SPI Firewall Protection: Select to enable or disable Stateful Packet Inspection. When enabled, access to the router from internet/wan by various protocols like ICMP are denied.

Internet Filter: Place a check to enable various Internet filter including Anonymous Internet Requests, Multicast packets, NAT Redirection, and IDNT port.

Web Filters: You can select to filter Proxy, Java, ActiveX, and/or Cookies.

6.4 Access Restrictions

6.4.1 Access Restrictions > Internet Access Policy

You can setup policies that deny or allow specific clients to access the internet.

🕅 Asant	te	511	artHub
EZ Set Up		Internet Access Policy	
Setup	Internet Access Policy		
Status		Access Policy: 1() Delete This Entry Summary	Help Explain
Wireless		Enter Policy Name:	
Firewall		Status: O Enabled O Disabled	
Access Policy	Applied PCs	Edit List (This Policy applies only to PCs on the List.)	
Application		Deny	
Administration	Access Restriction	O Allow Internet access during selected days and hours.	
	Schedule	Days: ▼Everyday Sun Mon Tue Wed Thu Fri Sat	
		Timing Control: 24 Hours 0 1 to 0 to 0 to 0 Timing Control: 0	
	Website Blocking by URL Address	URL 1: URL 2: URL 3: URL 3:	
		Keyword 1: Keyword 2:	

Access Policy: Select a policy number from the drop down list.

Enter Policy Name: Enter a name for the policy.

Status: Choose to Enable or Disable the selected policy.

Applied PCs

Click on the **Edit List** button to specify the network clients. Policy only applies to the PCs that are in the list.

			- Lorent	
AC Address	01	00:00:00:00:00	06	00:00:00:00:00:00
	02	00:00:00:00:00:00	07	00:00:00:00:00
	03	00:00:00:00:00	08	00:00:00:00:00:00
	04	00:00:00:00:00:00	09	00:00:00:00:00
	05	00:00:00:00:00	10	00:00:00:00:00
IP Address	01	192. 168. 1. 0	04	192. 168. 1. 0
	02	192. 168. 1. 0	05	192. 168. 1. 0
	03	192. 168. 1. 0	06	192. 168. 1. 0
IP Address				
Range	01	192. 168. 1. 0 ~ 0	03	192. 168. 1. 0 ~ 0
	02	192. 168. 1. 0 ~ 0	04	192. 168. 1. 0 ~ 0

You can specify each client by its MAC Address or IP Address. You can also specify a group of clients by entering their IP Address Range. Once you have specified all the clients, click **Save Settings**.

Access Restriction & Schedule

Select to **Deny** or **Allow** the specified clients to access the Internet by **Day** and **Time**.

Schedule	Days: 🗹 Everyday 🗌 Sun 🗌 Mon 🗌 Tue 🗌 Wed 🗌 Thu 🗌 Fri 🗌 Sat
	Timing Control: 💿 24 Hours 🔘 🔍 😳 🗸 to 🔍 to 🔍 🖓

Website Blocking

You can block the specified clients from accessing certain websites by URL or Keyword. Enter the URL or the Keyword you wish to block.

Website Blocking by URL Address	URL 1: URL 3:	URL 2: URL 4:	
Website Blocking	Keyword 1:	Keyword 2:	
by Keyword	Keyword 3:	Keyword 4:	

Click **Save Settings** to save the settings.

To view all the policies, click the **Summary** button.

7 Asar	nte		SmartHub AWRT-800N
EZ Set Up		Internet Access Policy	
Setup	Internet Access Policy		11-1-2
Status		Access Policy: 1() V Delete This Entry Summary	Help Explain
Wireless		Enter Policy Name:	
Firewall		Status: O Enabled O Disabled	
Access Policy	Applied PCs	Edit List (This Policy applies only to PCs on the List.)	
Application	A course Destriction	O Deny	
Administration	Access Restriction	ss Restriction Allow Internet access during selected days and hours.	

Cmartlub

Blocked Applications

After you selected **Allow** Internet accessing for Access Restriction, you can configure the Internet applications you want to block.

Select application port you want to block and click >> button to add it into Blocked List when the specified PCs have Internet access. Click << button to remove applications from the Blocked List.

If you have a custom application, manually enter its name, port range, protocol and click Add to add it into the "Applications" List
Access Restriction	Deny Allow Internet access during s	elected days and hours.	
Schedule	Days: 🗹 Everyday 🗌 Sun 🗌	Mon 🗌 Tue 🗌 Wed 🗌 Thu 🗌	Fri 🗆 Set
Website Blocking by URL Address	Timing Control: 24 Hours URL 1:		3:
Website Blocking by Keyword	Keyword 1:	Keyword 2:	
Blocked Applications	Keyword 3:	Keyword 4:	
	Note: Only three applications can be		
	Applications	Blooked List	
	DNS (53-53) HTTP (80-80) HTTPS (443-443) FTP (21-21) POP3 (110-110) IMAP (143-143) SMTP (25-25) NNTP (119-119) SNMP (161-161) Teinet (23-23) Game (1000-1200) Ping (0-0)	*	
	Application Name Port Range Protocol TCP [Add] [Modify] [Delex		
		Save Settings	Cancel Changes

Click **Save Settings** to save the settings.

6.5 Applications & Gaming

6.5.1 Applications & Gaming > Single Port Forwarding

If you want to host ftp server or online gaming, you must open up ports on the router. This page allows you to setup single port forwarding for the specified applications.

Note: Before using forwarding, you should assign static IP addresses to the designated PCs.

SmartHub

M Asante

EZ Set Up		Single Port Forward	ding Port Range	Forwarding	DMZ QoS		
Setup	Single Port Forwarding	External Port	Internal Port	Protocol	To IP address	Enabled	Help
Status	None M				192 . 168 . 1 . 0		Explain
	None M				192 . 168 . 1 . 0		
Wireless	None M				192 . 168 . 1 . 0		
Firewall	None 🚩				192 . 168 . 1 . 0		
	None M				192 . 168 . 1 . 0		
Access Policy		p	0	Both 💙	192 . 168 . 1 . 0		
Application		0	0	Both 🚩	192 . 168 . 1 . 0		
		٥	0	Both 🔽	192 . 168 . 1 . 0		
Administration		0	0	Both 💙	192 . 168 . 1 . 0		
		0	0	Both 💙	192 . 168 . 1 . 0		
		٥	0	Both 💙	192 . 168 . 1 . 0		
		0	0	Both 🎽	192 . 168 . 1 . 0		
		0	0	Both 🔽	192 . 168 . 1 . 0		
		0	0	Both 💌	192 . 168 . 1 . 0		
		0	0	Both 💙	192 . 168 . 1 . 0		

Application Name: Select or enter an Application Name.

External Port/ Internal Port: If you are only forwarding one port, you can put the same port number in both the **External** and **Internal** Port boxes.

Protocol: IP protocol to forward.

To IP Address: This should be the IP address of the computer you want to forward the ports to.

Make sure that you check the **Enabled** box to activate the setting, then click **Save Settings** to save the settings.

6.5.2 Applications & Gaming > Port Range Forwarding

If you want to host ftp server or online gaming, you must open up ports on the router. This page allows you to setup port range forwarding for the specified applications.

Note: Before using forwarding, you should assign static IP addresses to the designated PCs.

SmartHub

Asante 🕅

EZ Set Up		Single Port Forwarding	Port Range Forward	ding DMZ QoS		
Setup	Port Range Forwarding					
Status	Application Name	Start ~ End Port	Protocol	To IP address	Enabled	
		0 to 0	Both 💌	192.168.1.0		
Wireless		0 to 0	Both 💌	192.168.1.0		
Firewall		0 to 0	Both 💌	192 . 168 . 1 . 0		
		0 to 0	Both 🐱	192.168.1.0		
Access Policy		0 to 0	Both 💌	192.168.1.0		
Application		0 to 0	Both 💌	192.168.1.0		
Application		0 to 0	Both 💌	192.168.1.0		
Administration		0 to 0	Both 💙	192.168.1.0		
		0 to 0	Both 💌	192.168.1.0		
		0 to 0	Both 👻	192.168.1.0		

Application Name: Enter an Application Name.

Start ~ End Port: If you are only forwarding one port, you can put the same port number in both the **Start** and **End** Port boxes.

Protocol: If you are not sure which protocol to choose, select both.

To IP Address: This should be the IP address of the computer you want to forward the ports to.

Make sure that you check the **Enabled** box to activate the setting, then click **Save Settings** to save the settings.

6.5.3 Applications & Gaming > DMZ

DMZ (De-Militarized Zone) is a host without the protection of the router's firewall. It allows a computer to be exposed to unrestricted two-way communication with the Internet. You should only use this feature when the Port Forwarding function fails to make an application work.

Warning: Setting your computer as a DMZ host exposes it to various security vulnerabilities. This feature should be used only when needed.

Asante		SmartHub AWRT-600N	
EZ Set Up	Single Port Forwarding	Port Range Forwarding DMZ QoS	
Setup	DMZ		
Status		Enabled O Disabled	
Wireless	Source IP Address: (Any IP Address	
Firewall		🗩 💿 , 💿 , 💿 , 💿 to 💿	
Access Policy	Destination: (IP Address: 192. 168. 1.	
Application	ſ	MAC Address: 00:00:00:00:00 DHCP Client Table	
Administration			
		Save Settings Cancel Changes	

DMZ: Select to enable or disable DMZ.

Source IP Address: Specify the IP address that can communicate with the DMZ host.

Destination: Specify the IP Address or MAC Address of the DMZ host.

Note: Any DMZ host should have a new static IP address assigned to it because its IP address may change when using the DHCP function.

Click **Save Settings** to save the settings.

6.5.4 Applications & Gaming > QoS

QoS (Quality of Service) manages information as it is transmitted and received. It ensures better service to those applications with a higher priority.

EZ Set Up Setup	QoS (Quality of	Single Port Forward	ling Port Range	Forwarding DMZ	QoS	
	QoS (Quality of					
		WMM Support:	Enabled	O Disabled (Defa	-ult Eastlad)	Help
Status	Wireless	No Acknowledgemen		and the procession of the set	North Contractor	Explain
Wireless						
Firewall	et Access Priority Category	Enabled O D Applications	Disabled			
Access Policy		-	MSN Messenger	*		
Application		Priority	Medium (Recomm	nend) 🔽		
Administration			Add			
	Summary		100 C		25	
	Commeny	Priority	Name	Information		

<u>Wireless</u>

WMM Support: WMM is a wireless Quality of Service feature that improves quality for audio, video, and voice applications by prioritizing wireless traffic. To use this feature, your wireless client devices in your network must support Wireless WMM.

No Acknowledgement: If you want to disable the Router's Acknowledgement feature, so the Router will not re-send data if an error occurs, select Enabled. Otherwise, keep the default, Disabled.

Internet Access Priority

Enabled/Disabled: To use the QoS policies you set, select Enabled. Otherwise, select Disabled.

Category

There are five categories available. Select one of the following: Applications, Online Games, MAC Address, Ethernet Port, or Voice Device.

Applications

🕅 Asa	nte	511	artHub
EZ Set Up	1	Single Port Forwarding Port Range Forwarding DMZ QoS	
Setup	QoS (Quality of Service)	WMM Support: Enabled Disabled (Default: Enabled)	Help
Status	Wireless	No Acknowledgement: O Enabled (Disabled (Default: Enabled)	Explain
Wireless		\ <u>-</u>	
Firewall	Internet Access Priority Category	Enabled O Disabled Applications	
Access Policy		Applications MSN Messenger	
Application		Priority Medium (Recommend)	
Administration			
	Summary	Priority Name Information	
		Save Settings Cancel Changes	

Applications: Select the appropriate application. If you select *Add a New Application*, follow the instructions in the "Add a New Application "section.

Priority: Select the appropriate priority: **High**, **Medium**, **Normal**, or **Low**. Click **Add** to save your changes. Your new entry will appear in the Summary list.

Asante 🕅

SmartHub

EZ Set Up		Single Port Forwarding	g Port Range Forwarding DMZ QoS	
Setup	QoS (Quality of Service)	WMM Support	Enabled Disabled (Default: Enabled)	Help
Status	Wireless		C Enabled (Disabled (Default: Disabled)	Explain
Wireless				
Firewall	Internet Access Priority Category	Enabled O Dis Applications		
Access Policy			ISN Messenger	
Application		Priority M	Add	
Administration				
	Summary	Priority	Name Information	
			Save Settings Cancel Changes	

Enter a Name: Enter a name for this application.

Port Range: Enter the port range that the application will be using. For example, if you want to allocate bandwidth for FTP, you can enter 21-21. Select the protocol **TCP** or **UDP**, or select **Both**.

Priority: Select the appropriate priority: **High**, **Medium**, **Normal**, or **Low**. Click **Add** to save your changes.

Online Games

SmartHub AWRT-600N Asante 7 EZ Set Up Single Port Forwarding | Port Range Forwarding | DMZ | QoS Setup QoS (Quality of Service) WMM Support: Enabled O Disabled (Default: Enabled) Help Wireless Explain Status No Acknowledgement: O Enabled (Default: Disabled) Wireless Internet Access Priority Enabled O Disabled Firewall Category Online Games V Access Policy Games Counter Strike v Priority Medium (Recommend) Y Application Add Administration Summary Priority Name Information Save Settings Cancel Changes

Games: Select the appropriate game.

Priority: Select the appropriate priority: **High**, **Medium**, **Normal**, or **Low**. Click **Add** to save your changes.

🕅 Asa	nte			SmartHub AWRT-600N
EZ Set Up		Single Port Forwarding Port Range	Forwarding DMZ QoS	
Setup	QoS (Quality of Service)	WMM Support: Enabled	O Disabled (Default: Enabled)	Help
Status	Wireless	No Acknowledgement: O Enabled		Explain
Wireless		A		
Firewall	Internet Access Priority Category	Enabled O Disabled Online Games		
Access Policy		Games Counter Strike	*	
Application		Priority Medium (Recomme	nd)	
Administration				
	Summary	Priority Name	Information	
			Save Settings Cancel Cha	inges

Enter a Name Enter a name for your network device.

MAC Address Enter the MAC address of your network device.

Priority Select the appropriate priority: **High**, **Medium**, **Normal**, or **Low**. Click **Add** to save your changes.



Asante 🕅

SmartHub

EZ Set Up		Single Port Forwarding	Port Range	e Forwarding	DMZ Qa	s			
Setup	QoS (Quality of Service)	WMM Support:	Enabled		(Default E	nabled)			Help
Status	Wireless	No Acknowledgement:							Explain
Wireless									
Firewall	Internet Access Priority Category	Enabled O Dis Ethernet Port							
Access Policy		Ethernet Et	hernet Port 1	~					
Application		Phonty Et	hernet Port 1 hernet Port 2 hernet Port 3 hernet Port 4	nd) 🔽					
Administration			nemet Fort 4						
	Summary	Priority	<u>Name</u>	Informatio	<u>n</u>				
				-		-			
				Sav	ve Settings	Car	icel Chan	ges	

Ethernet: Select the Ethernet port that you want to configure.

Priority: Select the appropriate priority: **High**, **Medium**, **Normal**, or **Low**. Click **Add** to save your changes.

Asante	S	martHub
EZ Set Up	Single Port Forwarding Port Range Forwarding DMZ QoS	
Setup QoS (Quality of Service)		Help
Status Wireless	No Acknowledgement: O Enabled (Disabled (Default: Enabled)	Explain
Wireless Internet Access Priority		_
Firewall Category	Chabled Ulsabled	
Access Policy	Enter a Name	
Application	Priority High (Recommend)	
Kommissation	Add	
Summary	Priority Name Information	
	Save Settings Cancel Changes	

Enter a Name: Enter a name for your voice device such as VoIP or IP Phone.

MAC Address: Enter the MAC address of your voice device.

Priority: Select the appropriate priority: **High**, **Medium**, **Normal**, or **Low**. Click **Add** to save your changes.

Click Save Settings to save the settings.

Summary

Summary shows the configuration for various application priorities. You can Remove or Edit the configuration from this list.

6.6 Administration

6.6.1 Administration > Management

The Management screen allows you to change the router's log in password as well as other administrative settings.

Asant	te			SmartHub AWRT-800N
EZ Set Up		Management Log Diagnostics	Factory Defaults Firmware Upgrade	
Setup	Management			
Status	1222.07			Help Explain
Wireless	EZ Setup	EZ Setup:		
(MICIOSS	Web Access	Web Utility Access:	© нттр С нттра	
Firewall		Web Utility Access via Wireless:	• Enabled C Disabled	
Access Policy				_
	Remote Access	Remote Management	C Enabled Disabled	
Application		Web Utility Access:	@ HTTP @ HTTPs	
Administration		Remote Upgrade:	Enabled Disabled	
		Allow Remote IP Address:	Any IP Address	
		Remote Management Port.	© 0000_to 0_ 8080	
	UPnP	UPnP:	• Enabled C Disabled	
		Allow Users to Configure:	Enabled C Disabled	
		Allow Users to Disable Internet Access:	C Enabled . Disabled	
	Backup and Restore	Backup Configurations	Restore Configurations	
			Save Settings Cancel Char	ges

EZ Setup: Select to enable or disable **EZ Setup**. If **EZ Setup** is disabled, the user is allowed to access internet whenever he/she is connected to the router. If enabled, the user is required to enter username/password to access the internet.

Web Access: Select to enable or disable HTTPs and Wireless access for the Web Configuration Utility.

Remote Access: Select to enable or disable remote management/upgrade of the router. You can allow remote management from any IP Address or a specified IP Address as well as the port number.

Backup and Restore Configurations: You can choose to backup the router's settings so that you don't have to manually configure the settings again if you reset the router to factory default.

UPnP: Universal Plug and Play (UPnP) allows Windows Me and XP to automatically configure the router for various Internet applications, such as gaming and videoconferencing.

6.6.2 Administration > Log

You can choose to Enable or Disable logging of your network activity on this screen.

7 Asante	Si	AWRT-BOON
EZ Set Up	Management Log Diagnostics Factory Defaults Firmware Upgrade	
Setup	Log 💿 Enabled 🔿 Disabled	
Status		Help Explain
Wireless	View Log	
Firewall		
Access Policy		
Application		
Administration		
	Save Settings Cancel Changes	

Click View Log to view the detailed log.

Log			
Туре	Incoming Log 💉		
Incoming Log	Source IP Address	Destination Port Number	

6.6.3 Administration > Diagnostics

The Diagnostics screen allows you to perform Ping and Traceroute tests.

Asante	2			SmartHub AWRT-600N
EZ Set Up		Management Log	Diagnostics Factory Defaults Firmware Upgrade	
Setup	Diagnostics			
Status	Ping Test	IP or URL Address: Packet Size:	32 bytes (32~85500)	Help Explain
Wireless		Times to Ping:	5 V Start to Ping	
Firewall	Traceroute Test	IP or URL Address:		
Access Policy			Start to Traceroute	
Application				
Administration				
			Save Settings Gancel C	Changes

Ping Test: Enter the IP or URL Address you wish to ping and click Start to Ping.

Traceroute: Enter the IP or URL Address you wish to trace and click **Start to Traceroute**.

6.6.4 Administration > Factory Defaults

The Factory Defaults screen allows you to set all the router's settings to the factory default.

Asant	е					AWRT-600N
EZ Set Up		Management Log D	Diagnostics Factory	Defaults Firmware I	Jpgrade	
Setup	Factory Defaults	Restore Factory De	efaults			Help
Status						Explain
Wireless		網頁訊息	k.			
Firewall		2	Restore to Factory	Defaults?		
Access Policy		面面	定 取消			
Application						
Administration						

Click on the **Restore Factory Defaults** button to restore all the settings to default and click **OK** to continue.

6.6.5 Administration > Firmware Upgrade

The Firmware Upgrade screen allows you to upgrade the router's firmware.

🕅 Asant	te			SmartHub AWRT-600N
EZ Set Up		Management Log Diagnostics	Factory Defaults Firmware Upgrade	
Setup	Firmware Upgrade			
Status				Help Explain
Wireless		Check For New Firmware Version : Please select a file to upgrade:	Check For New Firmware Version	
Firewall			Start to Upgrade	
Access Policy		Warning: Upgrading firmware may ta the power or press the rea	ake a few minutes, please don't turn off	
Application		the power of press meres	or onton.	
Administration			0%	
		Upgrade mus	t NOT be interrupted !!	

You must download and unzip the new firmware first from <u>www.asante.com</u>

Click on Browse to browse to the new firmware, and click Start to Upgrade.

6.7 Status

6.7.1 Status > Router

The Router screen displays various status of the router including the firmware version.

🕅 Asar	nte			SmartHub
EZ Set Up		Router Local Netwo	ork Wireless Network	
Setup	Router Information	Firmware Version:	1.0.01	
Status		S/N:	1234567890	Help Explain
Wireless		Current Time: Internet MAC Address:	Thu Nov 19 03:21:03 2009 (GMT -08:00) 00:21:00:78:4C:9D	
Firewall		Host Name:	Asante	
Access Policy		Domain Name:	Asante	
Application	Internet Connection	Connection Type: Internet IP Address	Automatic Configuration - DHCP 0.0.0.0	
Administration		Subnet Mask	0.0.0.0	
		Default Gateway	0.0.0.0	
		DNS	0.0.00	
		МТО	Auto	
			IP Address Release IP Address Renew	
			Refresh	

Click on the **Refresh** button to reload the screen.

6.7.2 Status > Local Network

Asante 🕅



EZ Set Up		Router Local Networ	k Wireless Network		
Setup	Local Network				
Status		Local MAC Address:	00:21:00:78:4C:9C		Help Explain
Wireless		Router IP Address: Subnet Mask:	192.168.1.1 255.255.255.0		
Firewall					
Access Policy					
Application	DHCP Server	DHCP Server:	Enabled		
Administration		Start IP Address	192.168.1.100		
		End IP Address	192.168.1.149		
			-		
		DHCP Client Table		Refresh	

Click on the **DHCP Client Table** to display a list of all the DHCP clients in your network.

🕅 Asante

IP Address 💙				
Client Name	Interface	IP Address	MAC Address	Expired Time
Katie_Tung-NB01	LAN	192.168.1.100	00:23:8B:F9:AC:7F	22hr:1min:59sec
Katie_Tung-NB01	LAN	192.168.1.100	00:23:8B:F9:AC:7F	- 184

6.7.3 Status > Wireless Network

The Wireless Network screen displays various status about your wireless network.

Asan	nte				RT-600N
EZ Set Up		Router Local Network	k Wireless Network		
Setup	Wireless Network				
Status		MAC Address:	00:21:00:78:4C:9C		Help Explain
Wireless		Mode:	BGN-Mixed		
Wireless		Network Name (SSID):	SmartHub-AWRT600N		
Firewall		Radio Band:	Auto - 20/40MHz Channel		
		Standard Channel:	Auto		
Access Policy		Extension Channel:	Auto		
Application		Firewall:	Disabled		
		SSID Broadcast:	Enabled		
Administration				Refresh	

7. Specifications

Standards

- □ IEEE 802.11n draft 2.0
- □ IEEE 802.11a / b / g

Frequency

□ 2.4 / 5 GHz (Switchable)

Ports

- □ 1 x 10/100Mbps WAN port
- □ 4 x 10/100Mbps LAN port

Antenna type

□ 3 Internal 2 dBi antennas

Security

- □ WPA2, WPA, WEP 64/128-bit
- □ Wireless MAC Filter
- □ AP Isolation

LEDs

Power, Internet, Wireless, LAN1~4, Warranty WPS

Advanced Features

- □ Quality of Service (QoS)
- □ Stateful Packet Inspection (SPI) / DoS
- □ VPN Pass-through
- UPnP

WiFi Protected Setup

- PIN (Personal Identification Number)
- □ PBC (Push button configuration)

System Requirement

- □ Windows®, Mac®, or Linux® operating system
- □ Installed Ethernet adapter
- □ Recommended use with AWLL7025

Power

- □ Input: 100~240V AC, 50~60Hz
- Output: 12V / 1A

Dimensions

□ 179 x 132 x 28 mm

Temperature

□ Operating: 0°C to 40°C

Humidity

- □ 10% to 95% Non-Condensing
- - □ Limited 1-year warranty

Certification

□ FCC, CE, C-Tick, UL, TUV

App Appendix – Information

Federal Communication Commission Interference Statement

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

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

IMPORTANT NOTE: FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

SAR compliance has been established in typical laptop computer(s) with CardBus slot, and product could be used in typical laptop computer with CardBus slot. Other application like handheld PC or similar device has not been verified and may not compliance with related RF exposure rule and such use shall be prohibited.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject

to the following two conditions:

1) this device may not cause interference and

2) this device must accept any interference, including interference that may cause undesired operation of the device

Caution:

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

IMPORTANT NOTE: IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with IC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- EN60950-1: 2006 Safety of Information Technology Equipment
- EN50385 : (2002-08)
- Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110MHz - 40 GHz) - General public
- EN 300 328 V1.7.1: (2006-10)
- Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
- EN 301 893 V1.4.1: (2007-07)

 Broadband Radio Access Networks (BRAN);5 GHz high performance RLAN;Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive

EN 301 489-1 V1.6.1: (2005-09)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

- EN 301 489-17 V1.2.1 (2002-08)
- Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

€0560

1-	
⊡Česky [Czech]	[Jméno výrobce] tímto prohlašuje, že tento [typ zařízení] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
daDansk [Danish]	Undertegnede [fabrikantens navn] erklærer herved, at følgende udstyr [udstyrets typebetegnelse] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
通Deutsch [German]	Hiermit erklärt [Name des Herstellers], dass sich das Gerät [Gerätetyp] in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
etEesti [Estonian]	Käesolevaga kinnitab [tootja nimi = name of manufacturer] seadme [seadme tüüp = type of equipment] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, [name of manufacturer], declares that this [type of equipment] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
lesEspañol [Spanish]	Por medio de la presente [nombre del fabricante] declara que el [clase de equipo] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Technical Support

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Web Site: www.asante.com

^{*}Theoretical maximum wireless signal rate derived from IEEE standard 802.11g and draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, mix of wireless products used, radio frequency interference (e.g., cordless telephones and microwaves) as well as network overhead lower actual data throughput rate. This product is based on IEEE draft 802.11n specification and is not guaranteed to be compatible with future versions of IEEE 802.11n specification. Compatibility with draft 802.11n devices from other manufactures is not guaranteed. Specifications are subject to change without notice. Photo of product may not reflect actual content. All products and trademarks are the property of their respective owners. Copyright ©2009 AWRT-600N®