Celcom Home Fibre Installer Guidelines

SKYWORTH RN685 User Manual

Version 3.0

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Product Specification

Item	Specification
Product Name	MESH WIRELESS GATEWAY AX3000
WAN Interface	1*RJ45 Gigabit Ethernet Port
LAN Interface	4*RJ45 Gigabit Ethernet Port
Wi-Fi Standard	2.4GHz IEEE 802.11b/g/n/ax 5GHz: IEEE 802.11a/n/ac/ax
Band	2.4GHz and 5GHz dual-band concurrent
MIMO	2.4GHz: 2x2 MU-MIMO 5GHz: 2x2 MU-MIMO
Data Rate (maximum)	2.4GHz - 300Mbps(11n@40MHz) 574Mbps(11ax@40MHz) 5GHz - 867Mbps(11ac@80MHz) 1201Mbps(11ax@80MHz) 2402Mbps(11ax@160MHz)
Antennas	4*external Antennas (5dBi)
Wi-Fi Mesh	
Wi-Fi Mesh Standard	Wi-Fi Alliance EasyMesh R2
Capacity	Maximum 6 Nodes (1 Main Router + 5 agents)
Backhaul Type	Wired or Wireless auto-redundancy
Environment	
Rated Power Input	12VDC/1.5A
Operating Temperature	0 ~ 45℃(32~113℉)
Storage Temperature	-20 ~ 65℃(-4~149℉)
Operating Humidity	0 ~ 95% non-condensing

Front View

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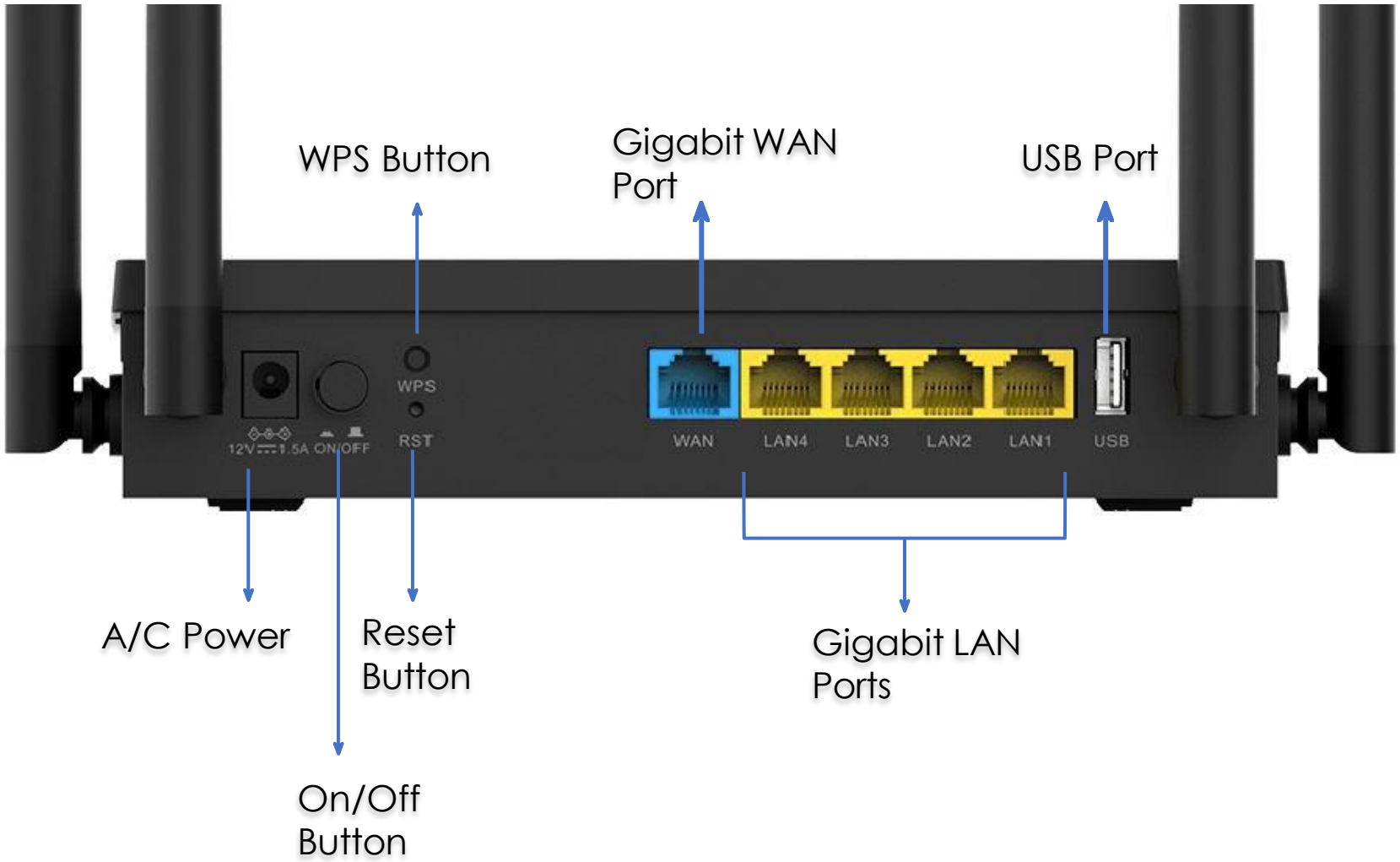
Product Specification



Back View

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Product Specification

LED	COLOR	STATUS	DESCRIPTION
PWR	Yellow	ON	System boot up completely
		OFF	Power Off
INT	Yellow	ON	Device got IP and internet service connection successful
		OFF	The device cannot obtain an IP address
WPS	Yellow	ON	Router is connected in mesh network and backhaulsignal is very good
		OFF	Mesh disabled
		FLASH	Mesh network or WPS connection is being established
LAN1 - LAN4	Yellow	ON	Ethernet port is Up but no data transfer
		OFF	Ethernet port is down
		FLASH	The port is Up and there is data transmission
WAN	Yellow	ON	The WAN port is Up but no data transmitting
		OFF	The WAN port is Down
		FLASH	The WAN port is up and transmitting data
2.4/5G	Yellow	ON	Wi-Fi is Up but no data transfer
		OFF	The WiFi is turned off
		FLASH	Wi-Fi is Up and there is data transmission
USB	Yellow	ON	USB device connected
		OFF	No USB device connected

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Package Content

1. Router
2. Power Adapter
3. Ethernet Cable
4. Quick Installation Guide

Packaging Items		
Router		Mesh Wi-Fi 6 Router
Power Adapter		Output 12VDC/1.5A Power Adapter
Ethernet Cable		Standard CAT5e Ethernet cable
Quick Installation Guide		This guide provides basic product specification and information for installing the device and get it up and running on your home network

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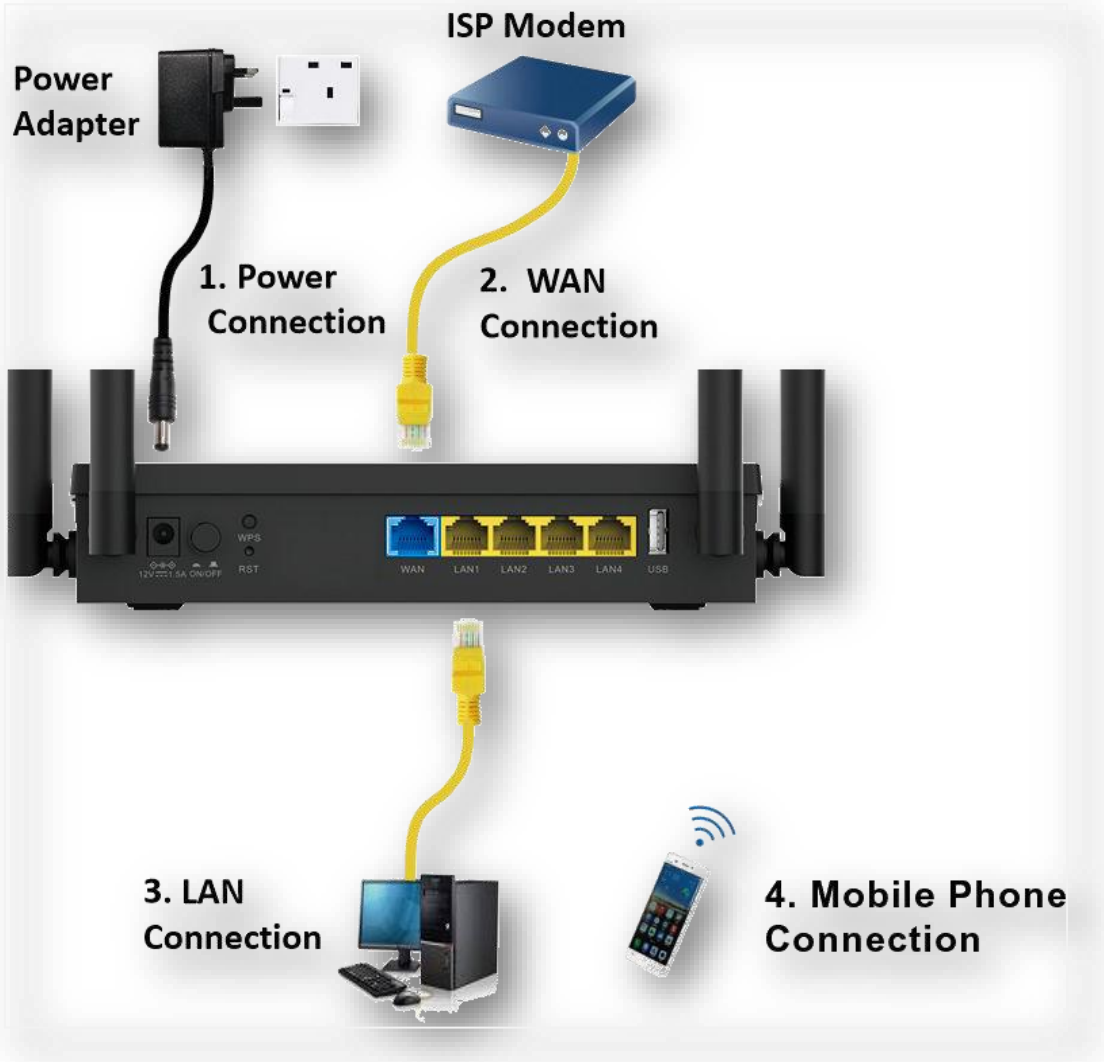
Router Physical Setup



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WEBGUI ACCESS AND STATUS PAGE

Web GUI Access and Status Page

1) Launch any web browser and key-in 192.168.1.1
2) Key-in the Username and Password as below:-

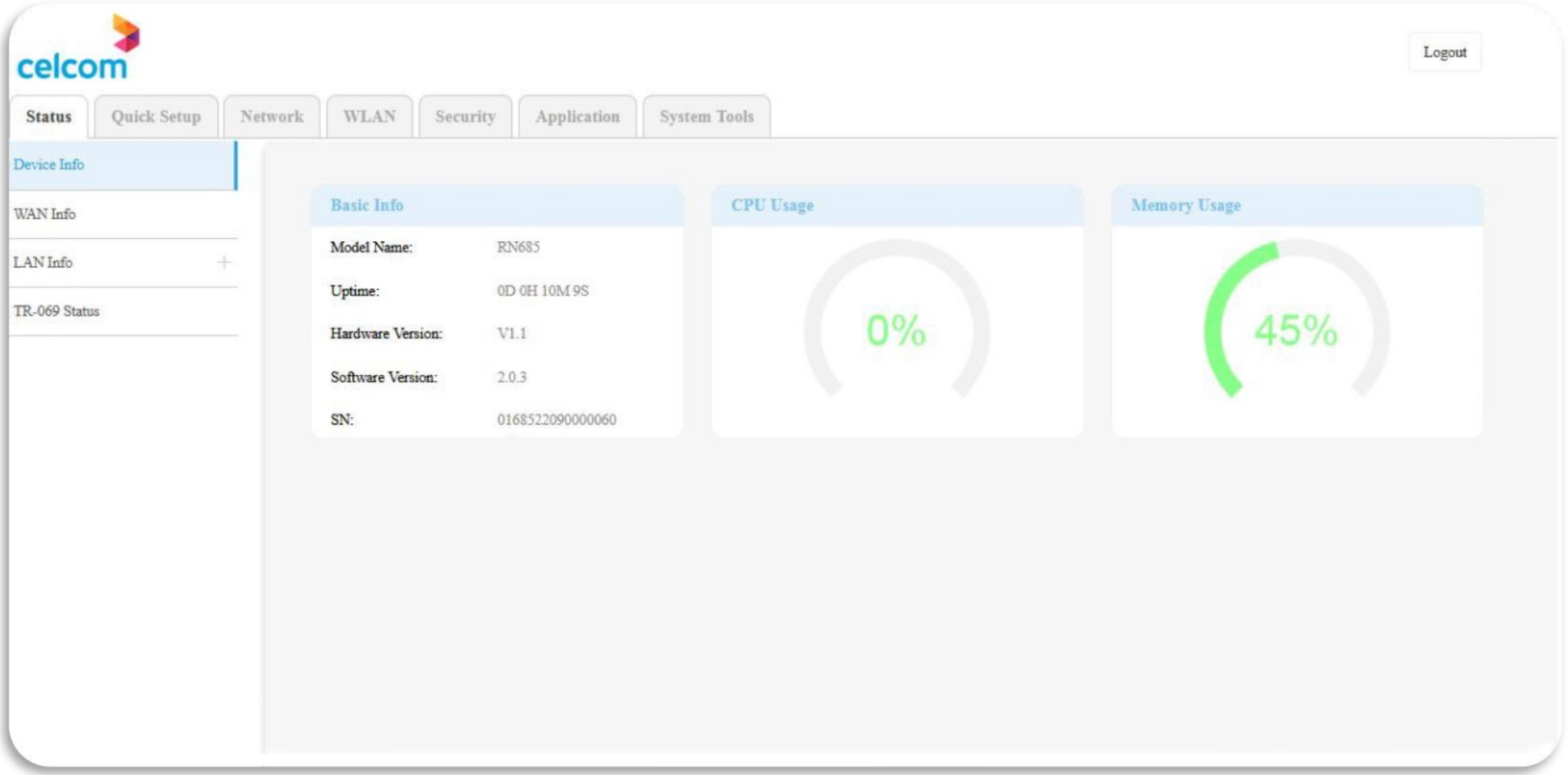
<u>For Installer</u>
Username: admin
Password: c3lc0msuper

<u>For Normal User/Customer</u>
Username: customer
Password: celcom123

3) Next, click on Login

Web GUI Access and Status Page

4) After the login, you will see the Device Info Status page



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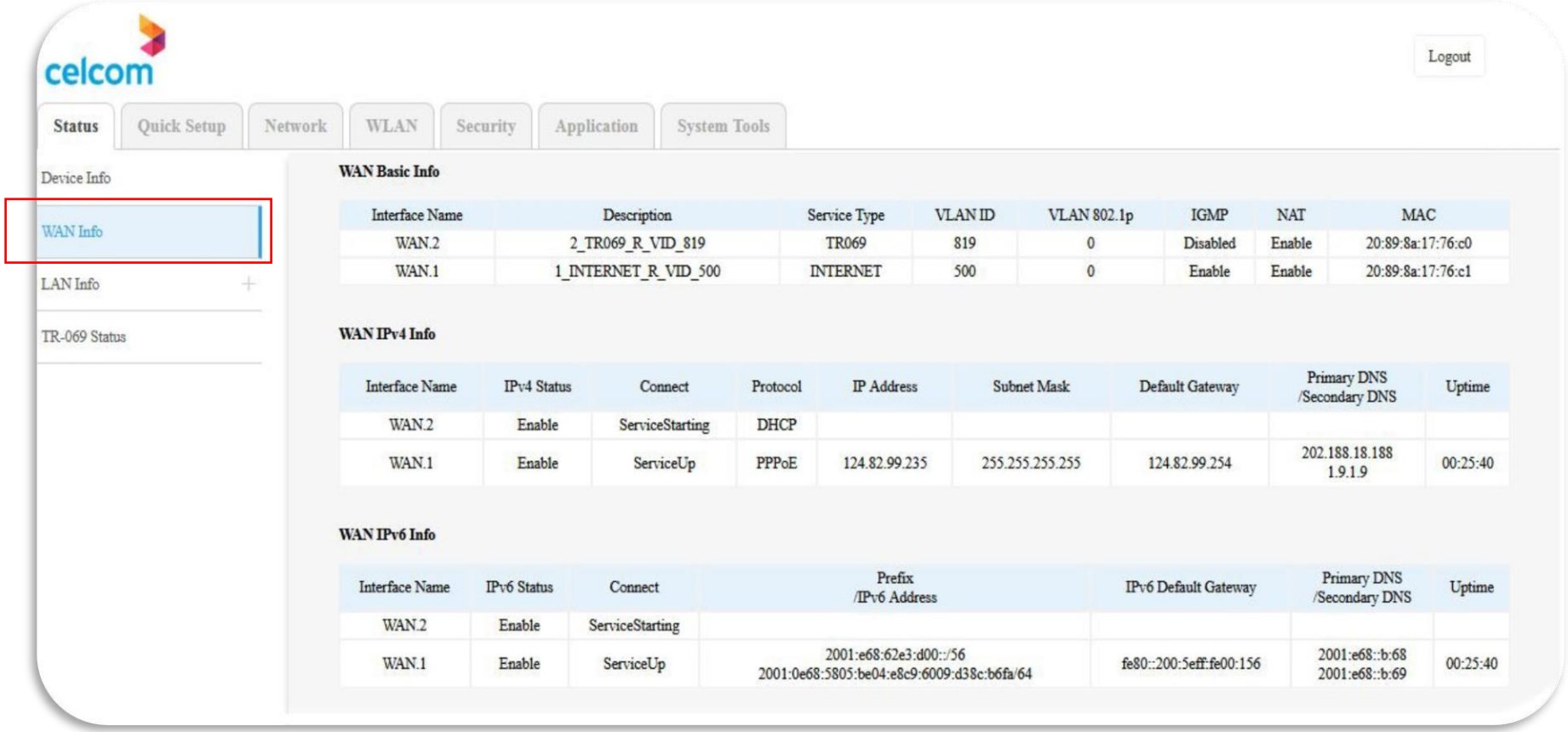
Web GUI Access and Status Page

5) You can view the WAN Info page when you click on the WAN Info sub menu on the left



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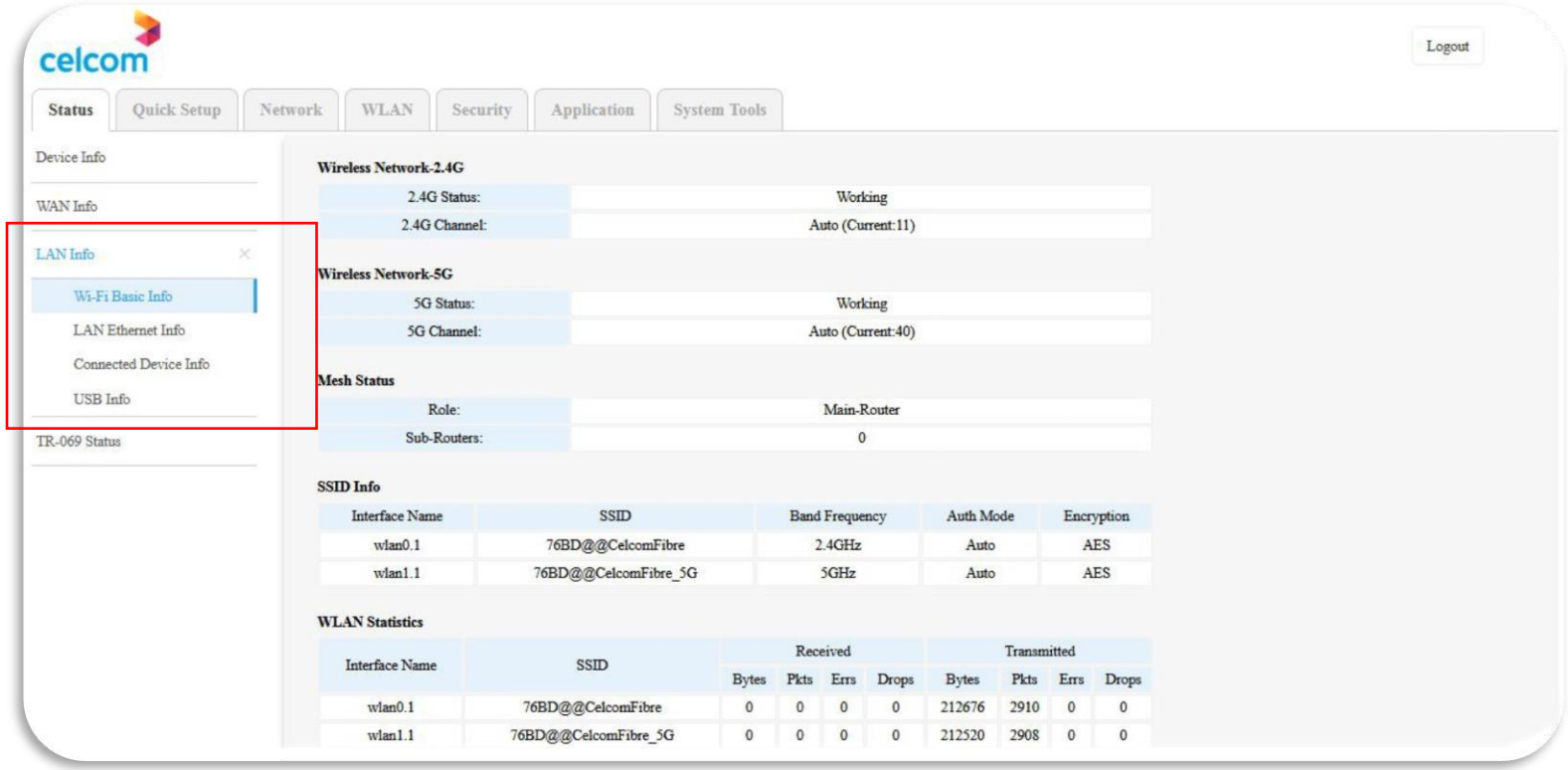
Web GUI Access and Status Page

6) When you click on LAN Info sub menu on the left, you will have drop sub menu.

7) The first menu will be the Wireless Basic Info



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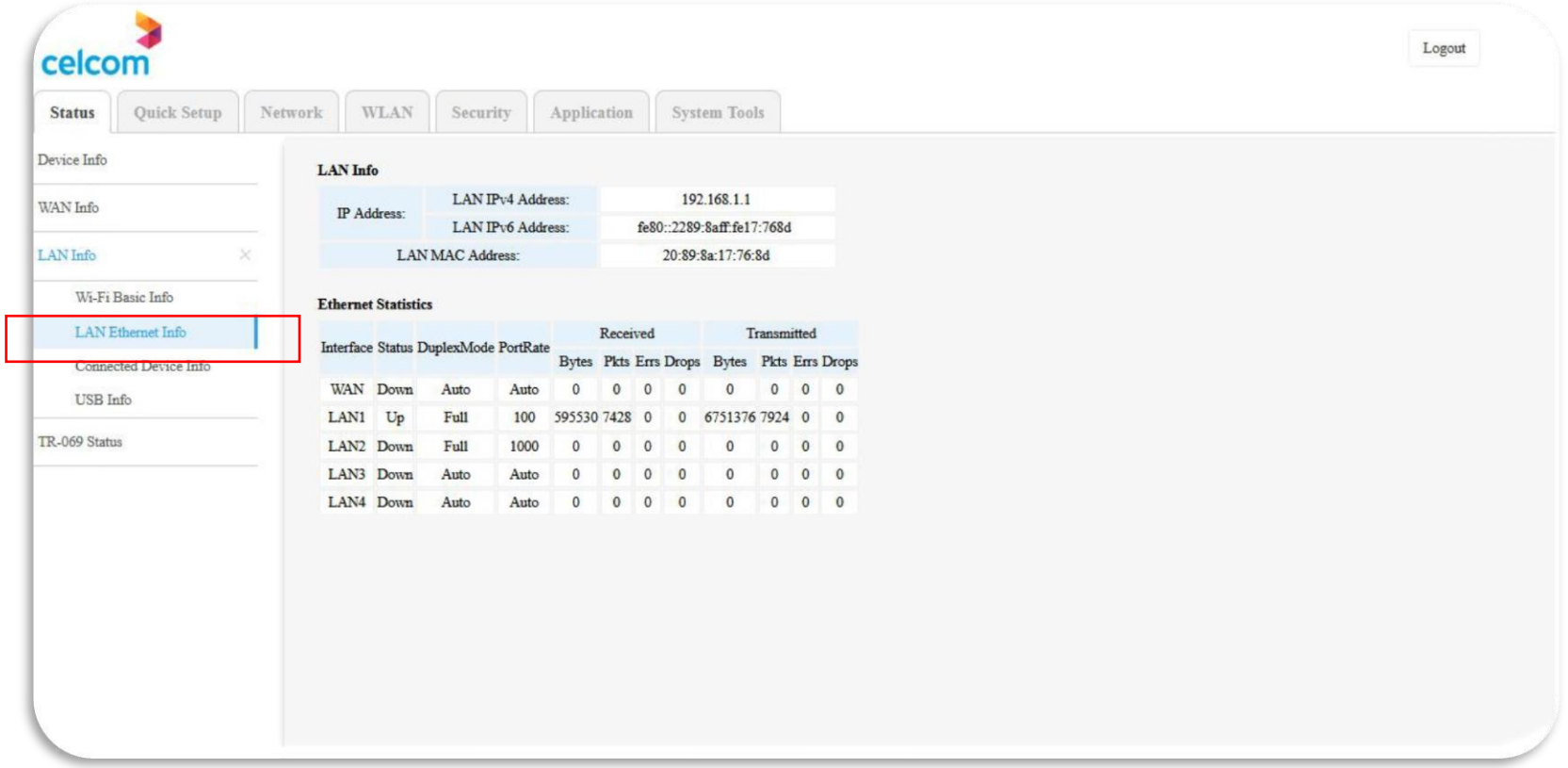
Web GUI Access and Status Page

8) You will be able to view the LAN information and LAN speed in the LAN Ethernet Info sub menu



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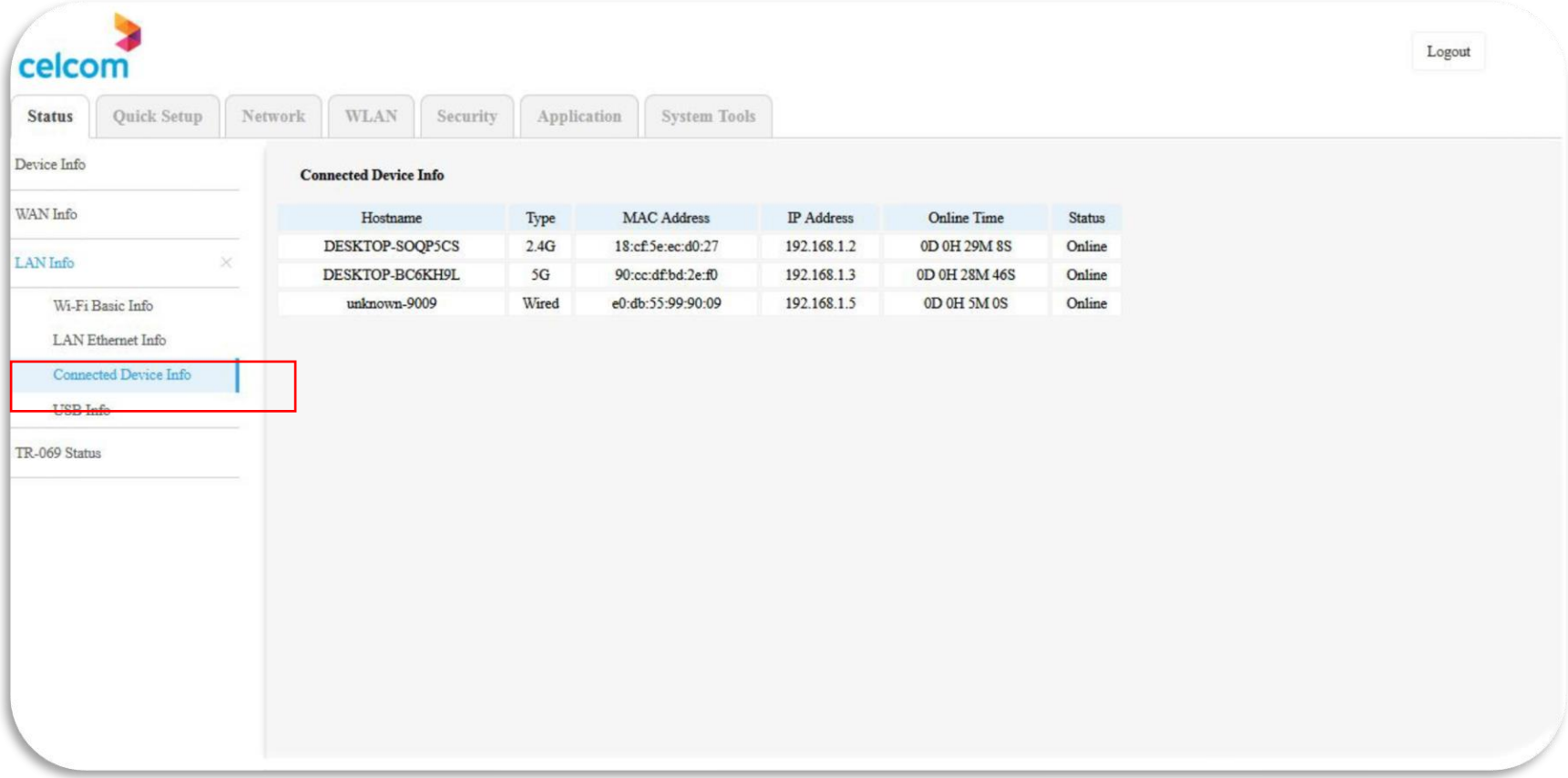
Web GUI Access and Status Page

9) Connected Device Info shows all the devices that is connected to the router



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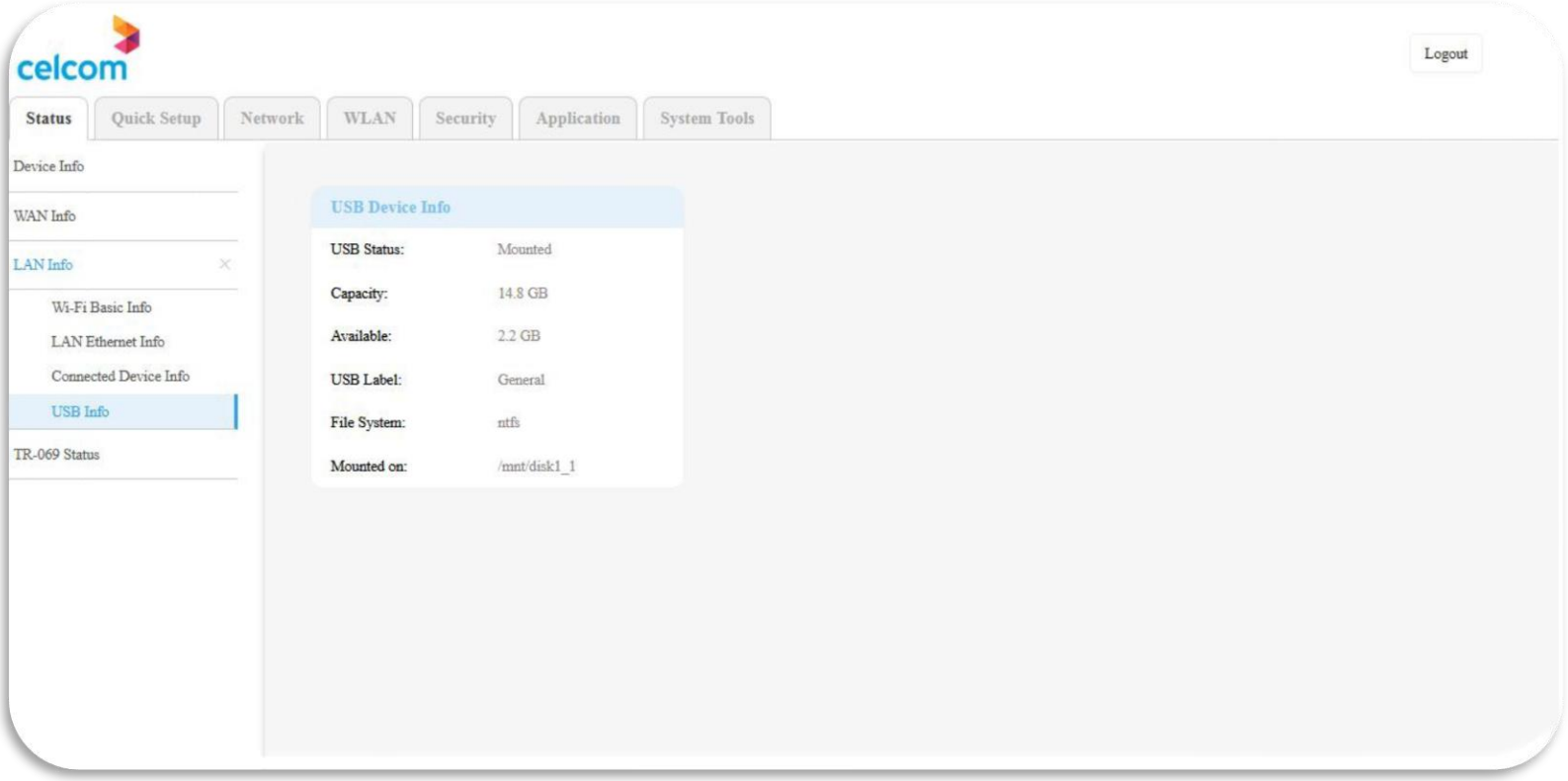
Web GUI Access and Status Page

10) If you have any USB storage device connected to the router, the USB Info will display the information of the USB device.



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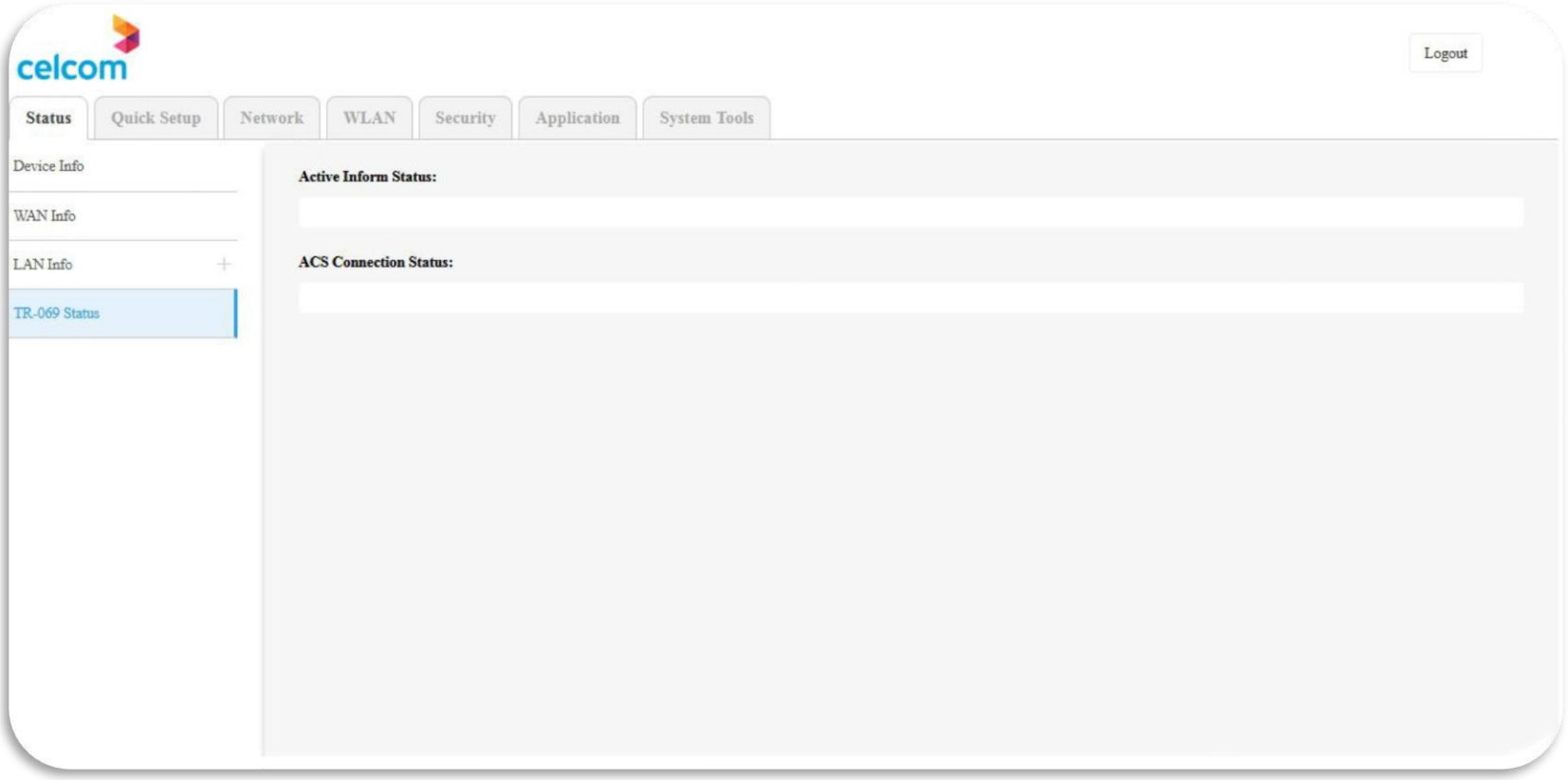
Web GUI Access and Status Page

11) In TR-069 Status page will show the ACS connection status



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NETWORK CONFIGURATION

- Quick Setup Menu
- Network Menu

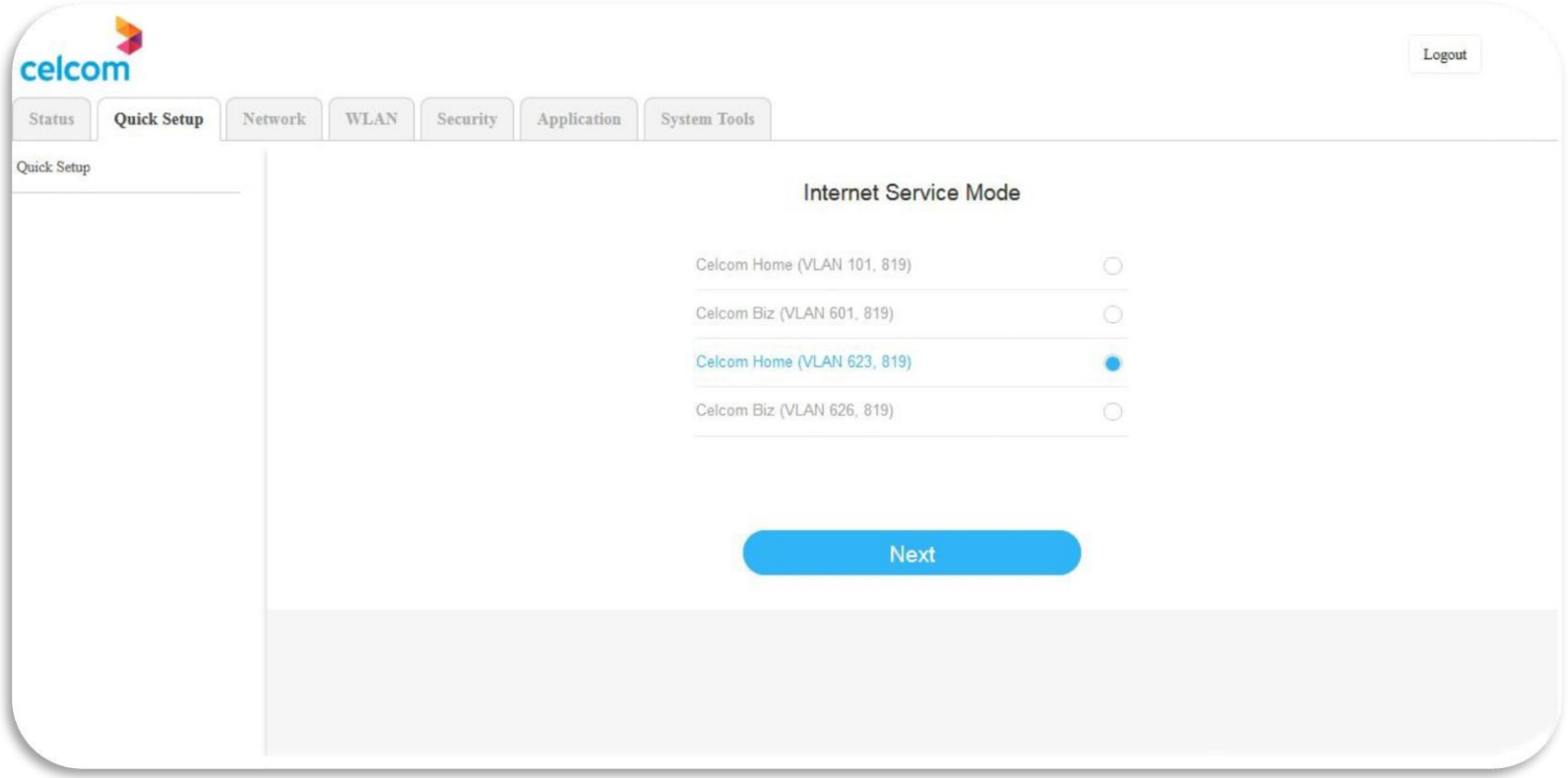
VLAN ID Profile Reference Table

Please choose the correct Internet Service Provider Profile to ensure the correct VLAN

Access Provider	Internet Service Mode	Internet Service Provider Profile	VLAN HSI	VLAN ACS
TM (Home/Biz)	Celcom Home (VLAN 623, 819)	Celcom Home2	623	819
Allo (Home)	Celcom Home (VLAN 101, 819)	Celcom Home1	101	819
CTSB (Retail)	Celcom Home (VLAN 101, 819)	Celcom Home1	101	819
CTSB (Biz)	Celcom Biz (VLAN 601, 819)	Celcom Biz1	601	819
SACOFA (Retail)	Celcom Home (VLAN 101, 819)	Celcom Home1	101	819
Forest City (Retail)	Celcom Home (VLAN 101, 819)	Celcom Home1	101	819
Forest City (Biz)	Celcom Biz (VLAN 601, 819)	Celcom Biz1	601	819

Network Configuration - Quick Setup Menu

1) In the Quick Setup page, you may select the required Internet Service Mode profile and click on Next



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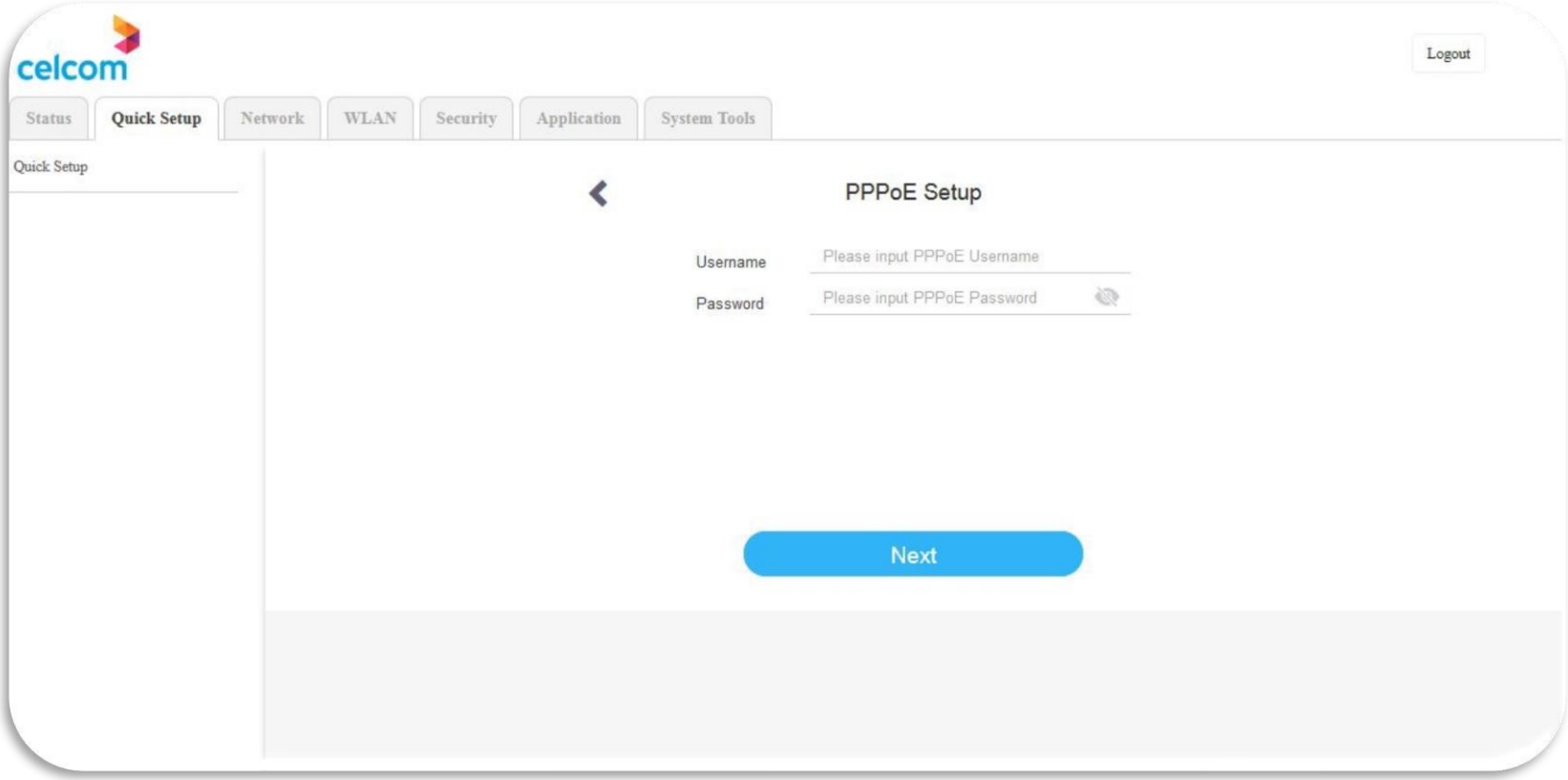
Network Configuration - Quick Setup Menu

2) Key-in the Celcom internet account Username and password and click Next



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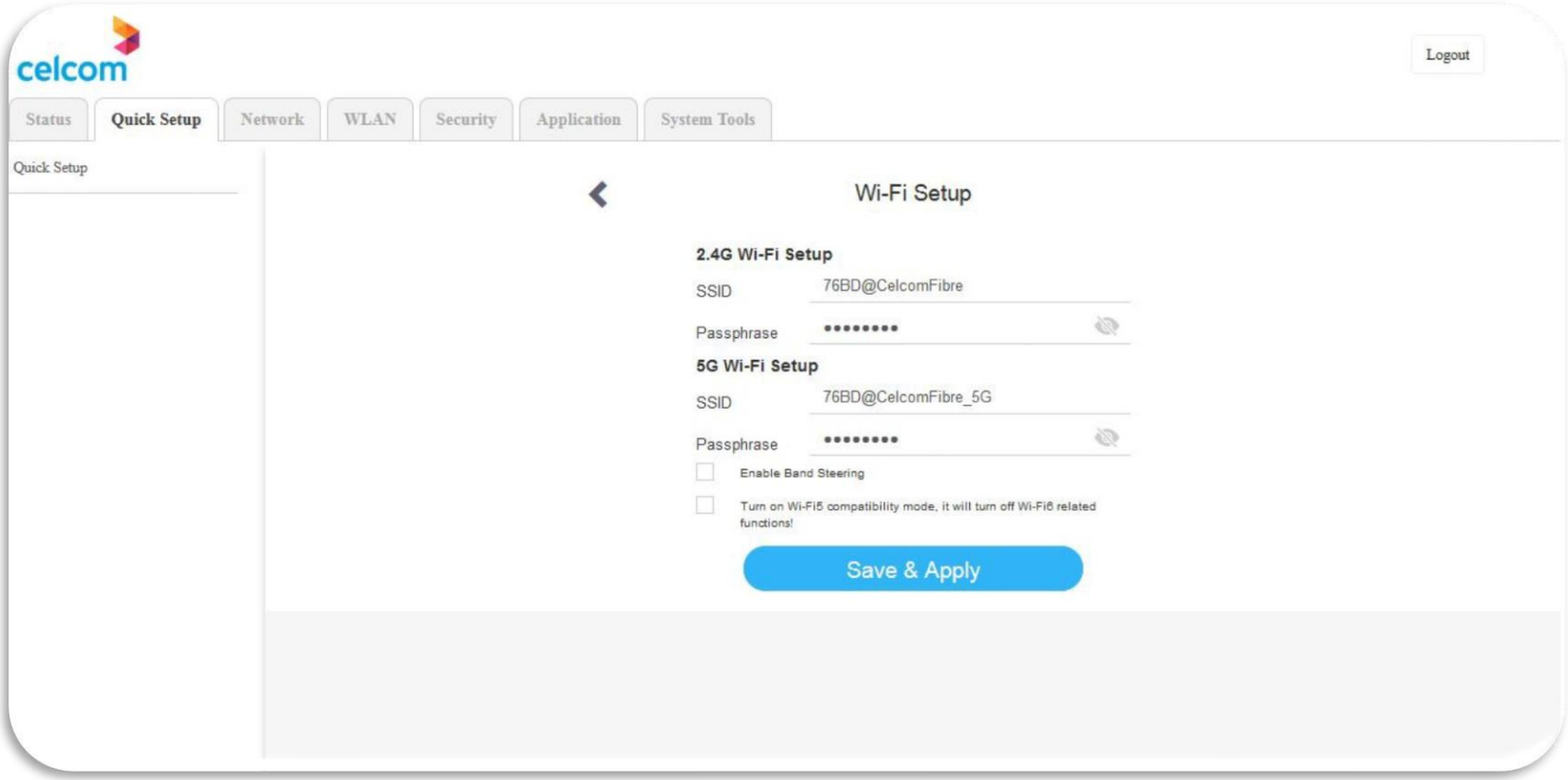
Network Configuration - Quick Setup Menu

3) You may change the wireless name and password in the SSID and Passphrase section if needed.
4) The password will be visible when you click on the eye located on the right side of Passphrase
5) When you're done, click on Save & Apply



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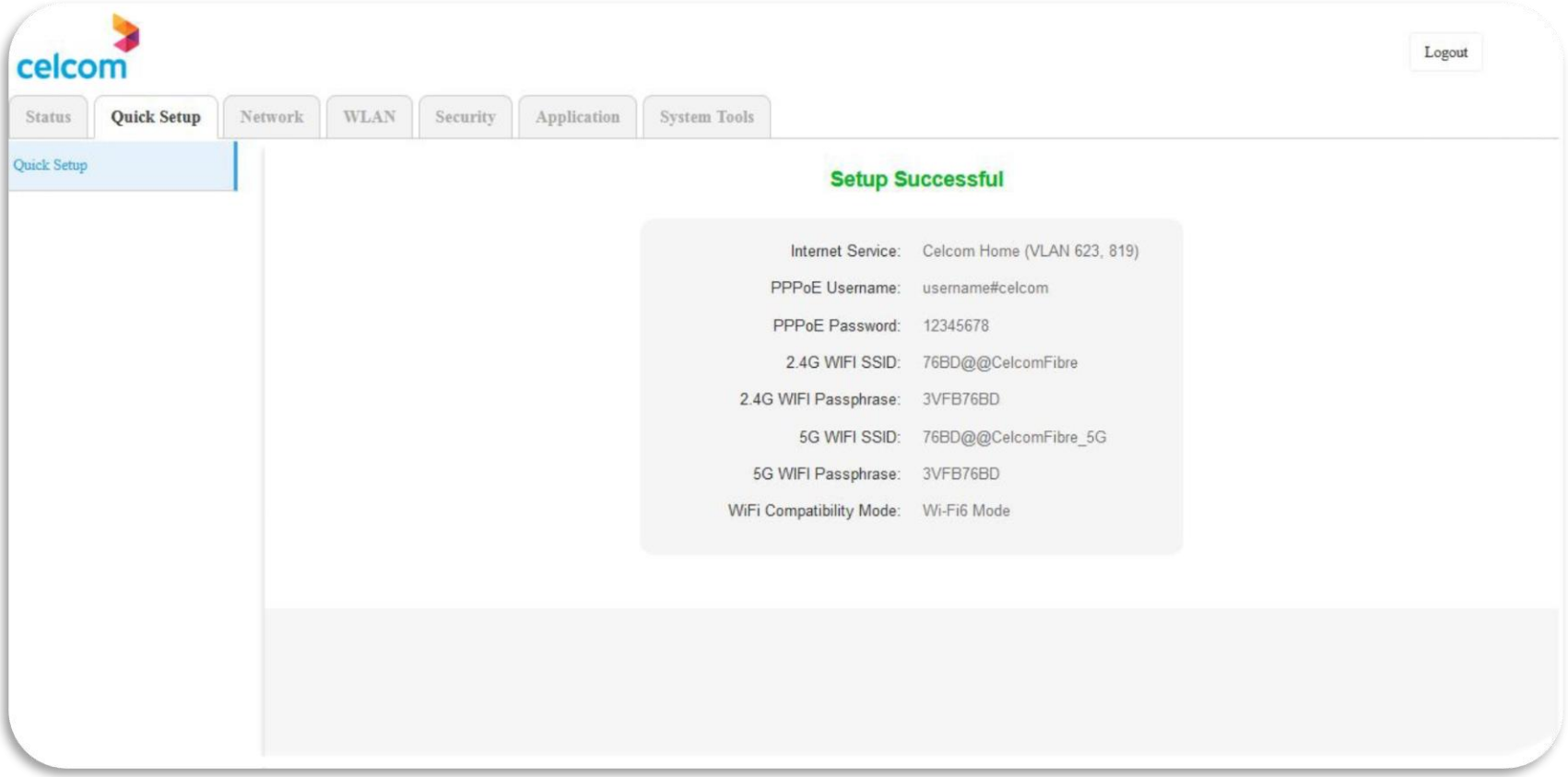
Network Configuration - Quick Setup Menu

6) Lastly, a summary of the configuration be displayed



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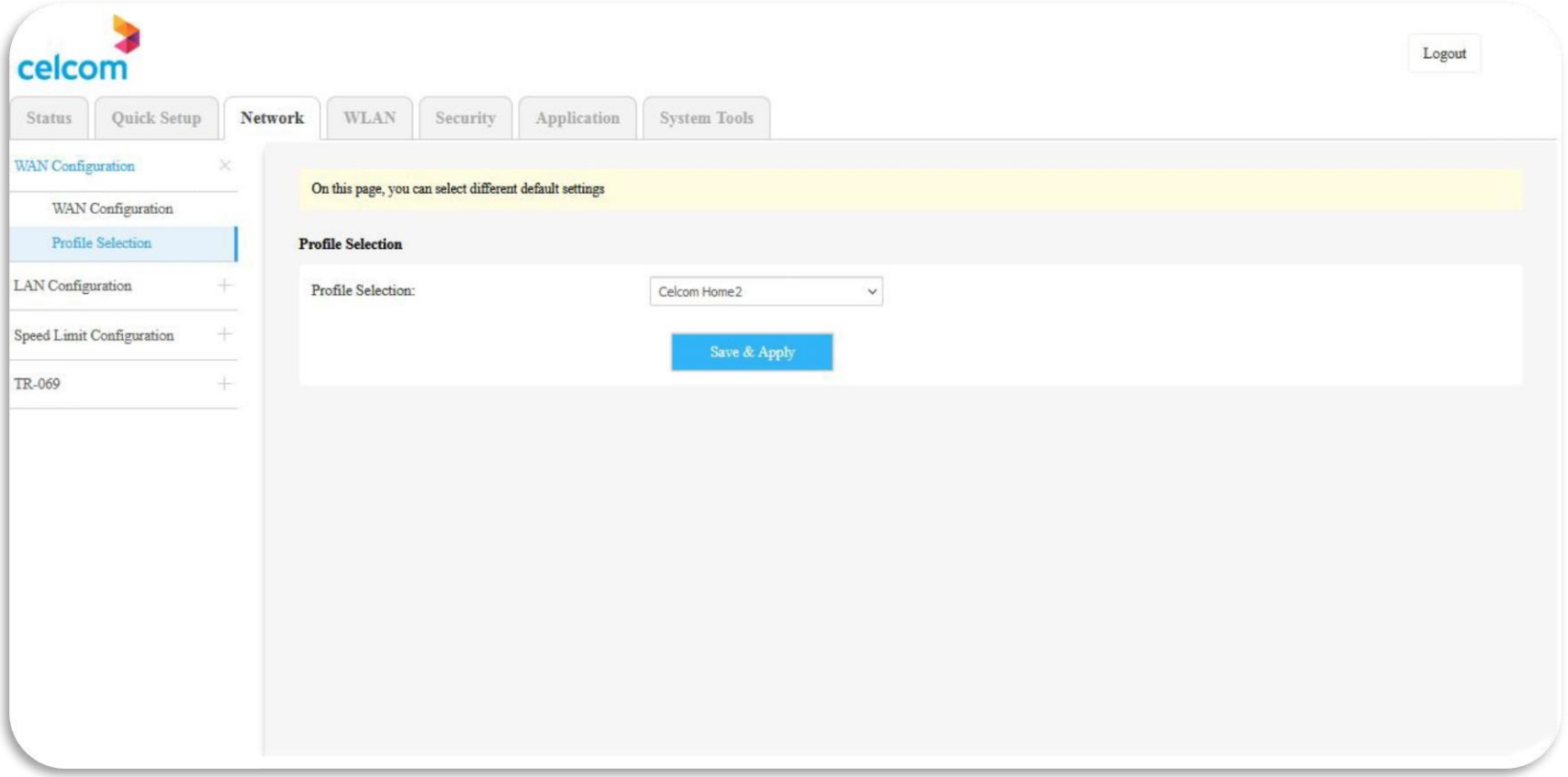
NETWORK MENU

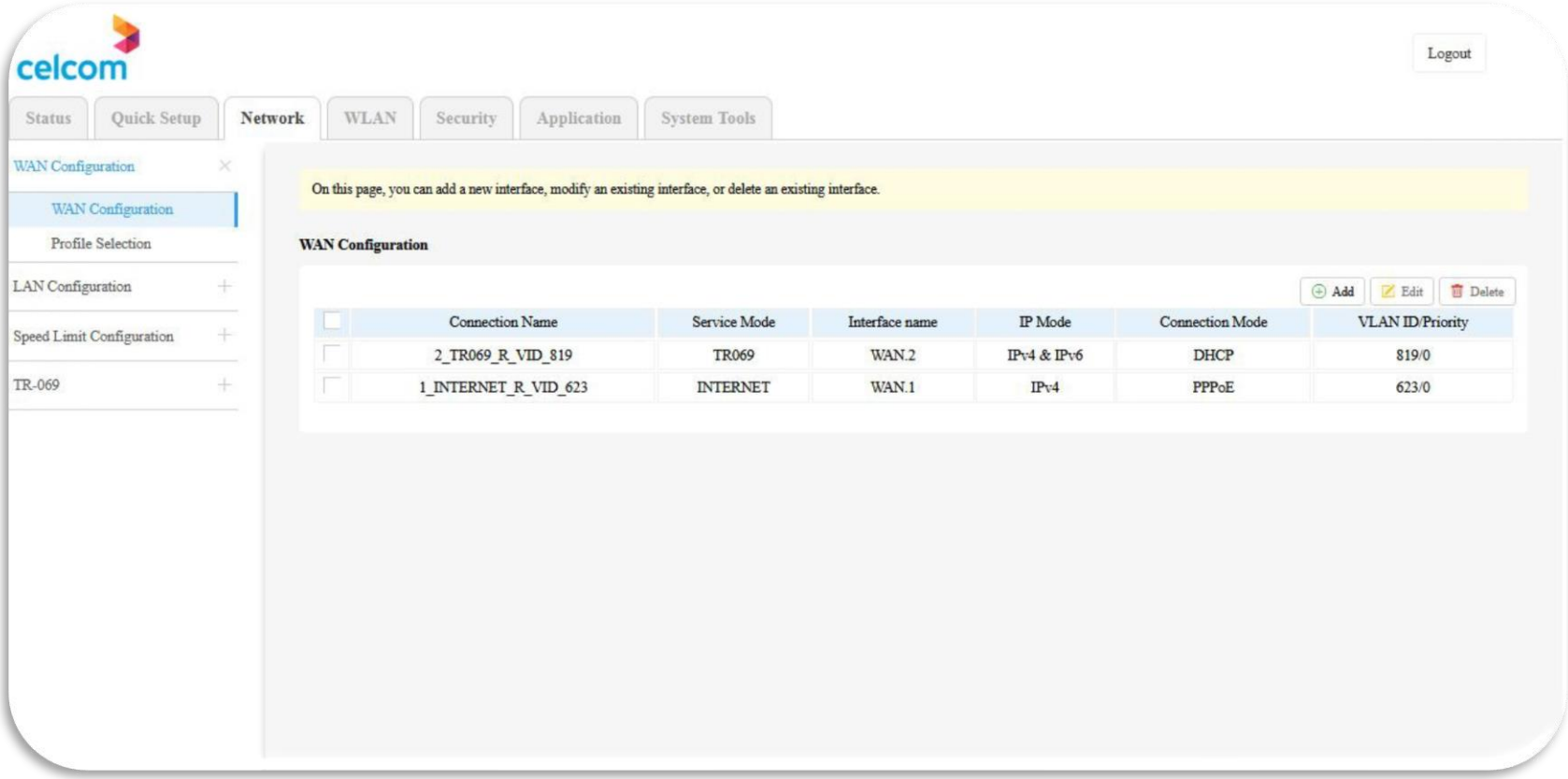
Network Configuration – Network Menu

1) At the Profile Selection, you can change the Celcom internet service mode profile



Network Configuration – Network Menu

2) In the WAN Configuration page, you may configure or edit the current internet settings in the WAN configuration page
3) Select Internet service mode by check on the left box and click on Edit button on the top right



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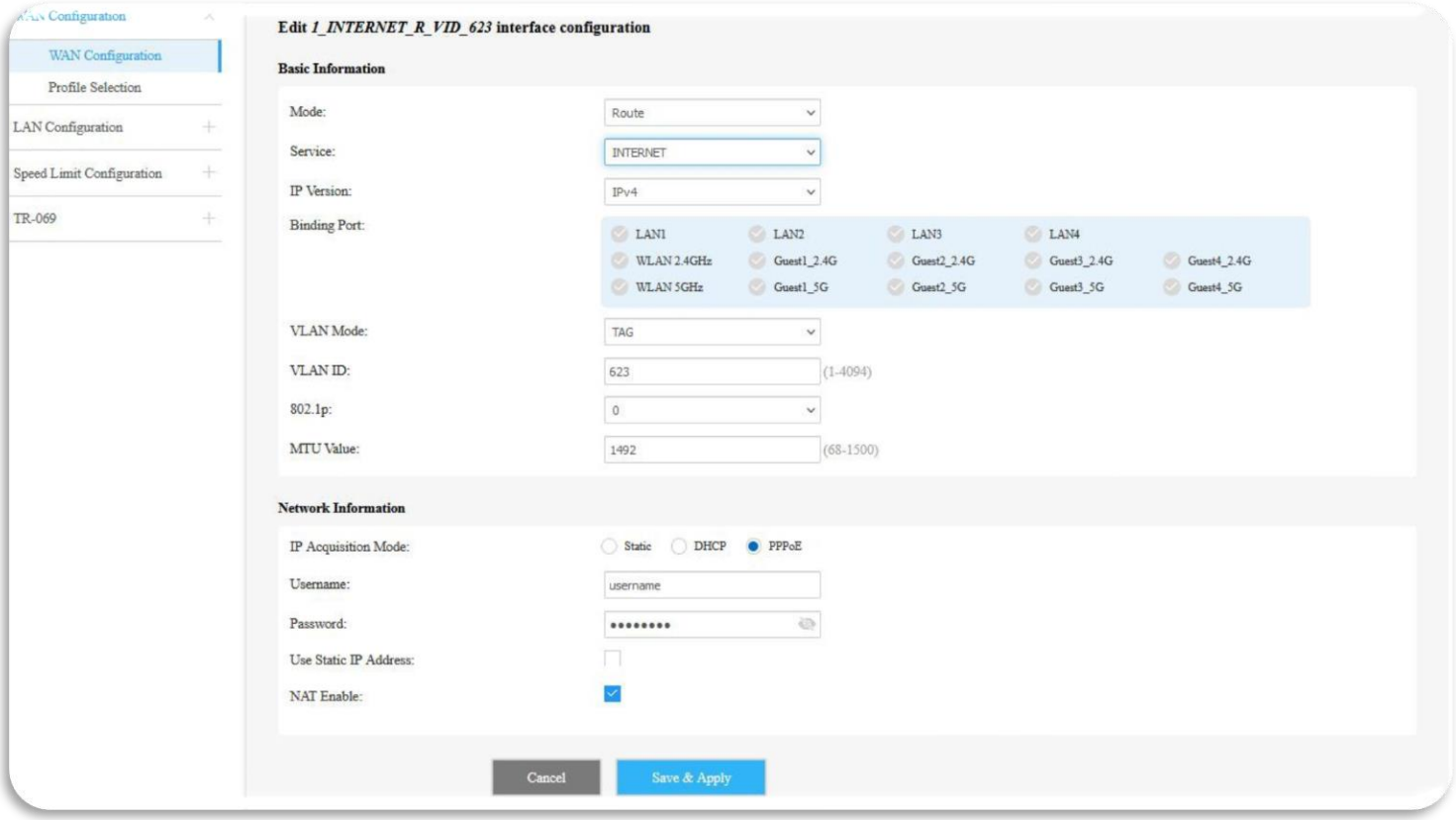
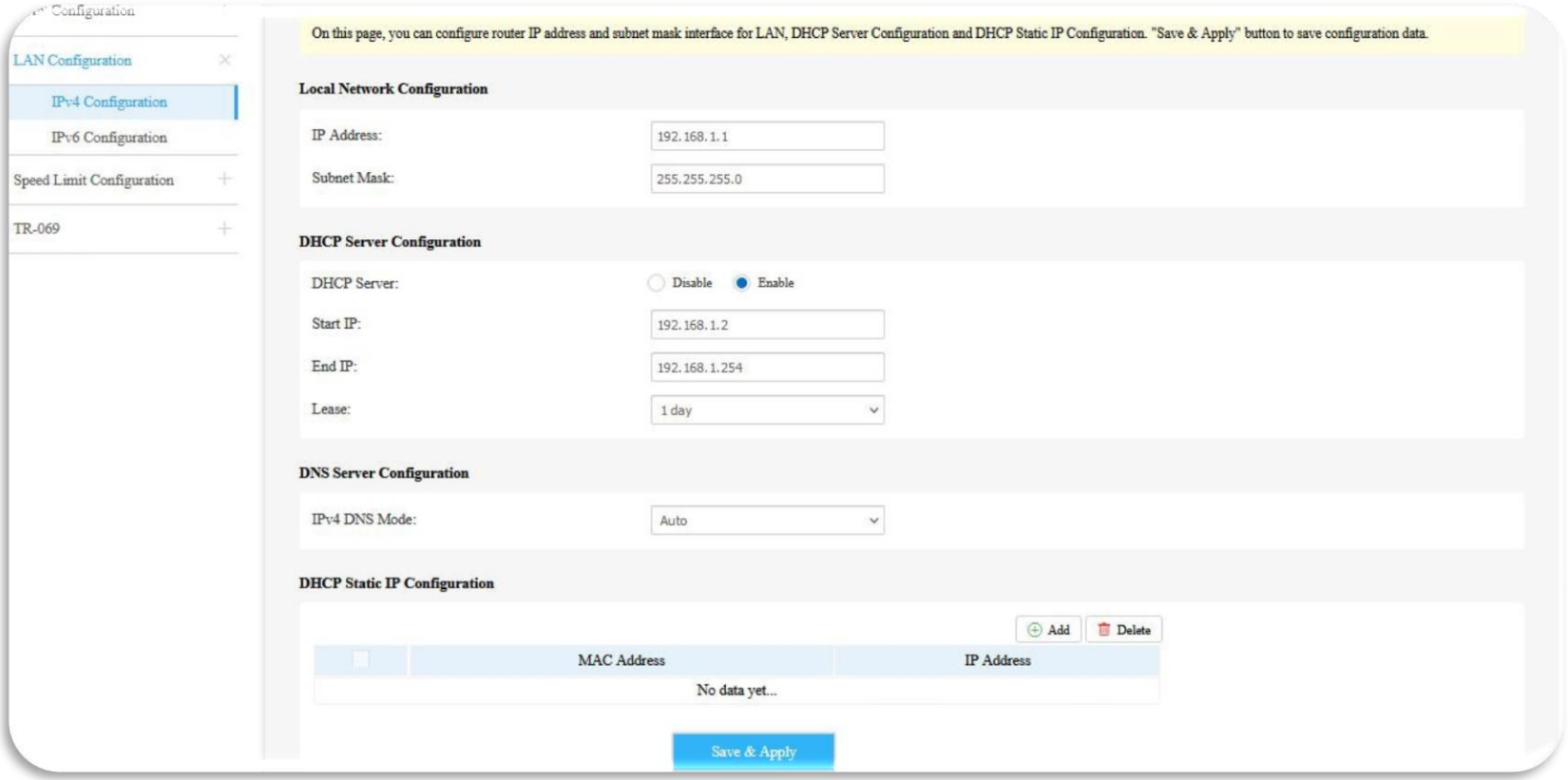
Network Configuration – Network Menu

4) Key-in the Celcom internet account in Username and Password
5) Once done, click on Save & Apply



Network Configuration – Network Menu

6) In the LAN Configuration, you can change the setting of the IPv4 and IPv6 IP address setting

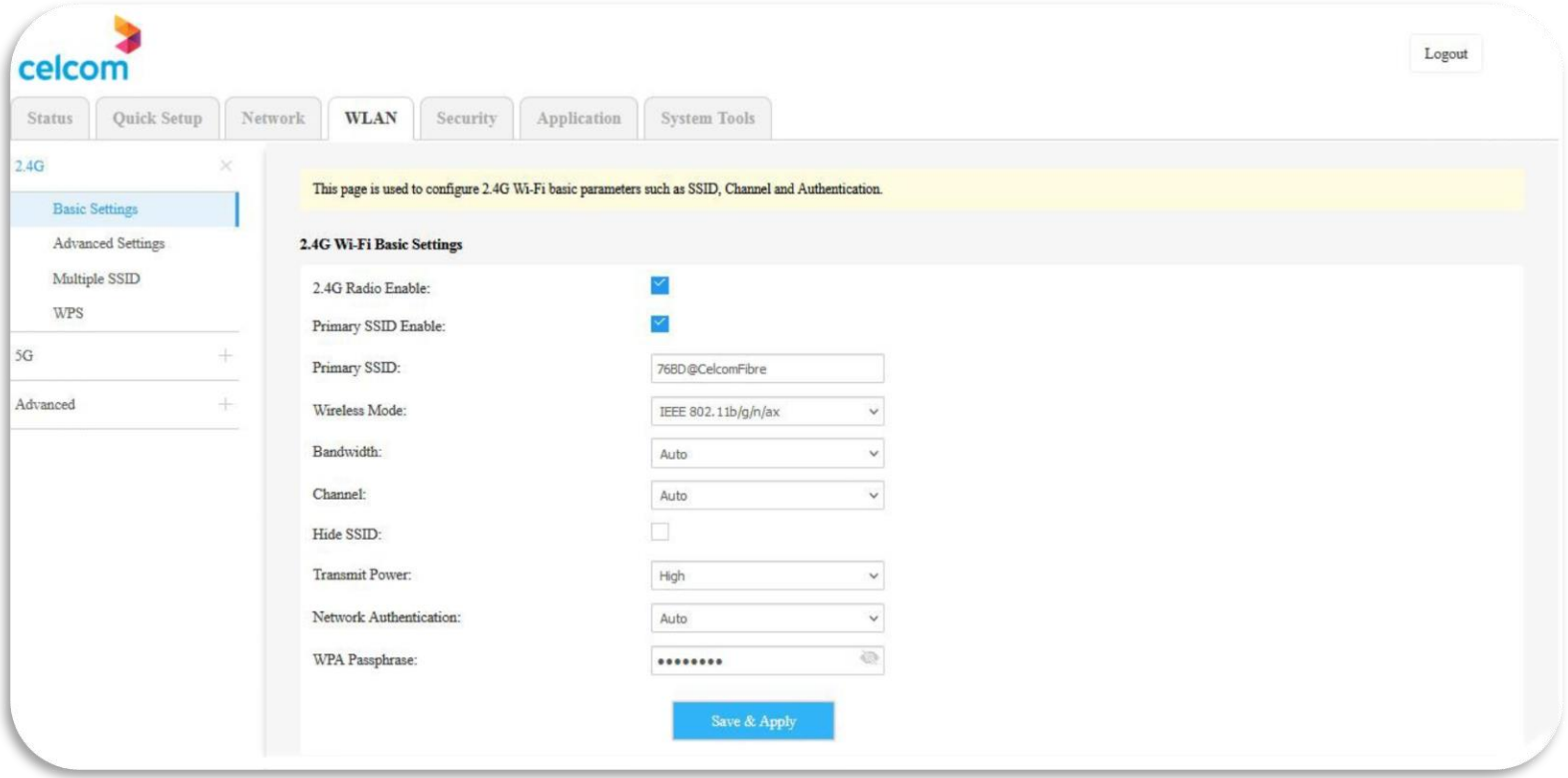


WIRELESS CONFIGURATION

- 2.4GHZ Setup
- 5GHz Setup

Wireless Configuration - 2.4GHz Setup

1) You can edit the wireless settings in the WLAN menu
2) Once you access the WLAN menu, you will see and able to edit the 2,4GHz wireless SSID name and password passphrase.
3) Click on Save & Apply when the setting is done



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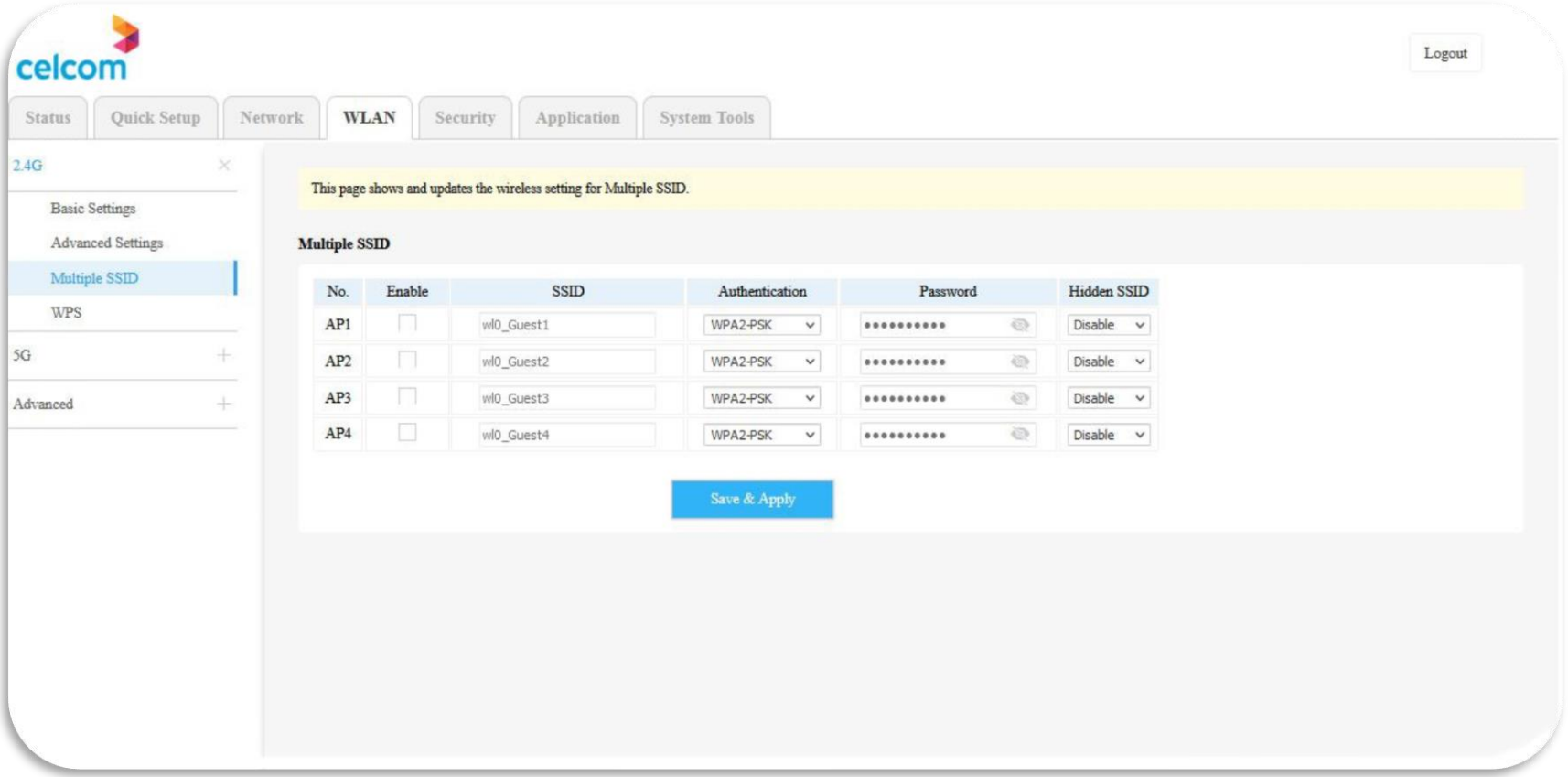
Wireless Configuration - 2.4GHz Setup

4) You can add multiple guest SSID in the Multiple SSID for 2.4GHz wireless
5) Check the box on the left and configure the SSID wireless name and Password
6) Then click on Save & Apply



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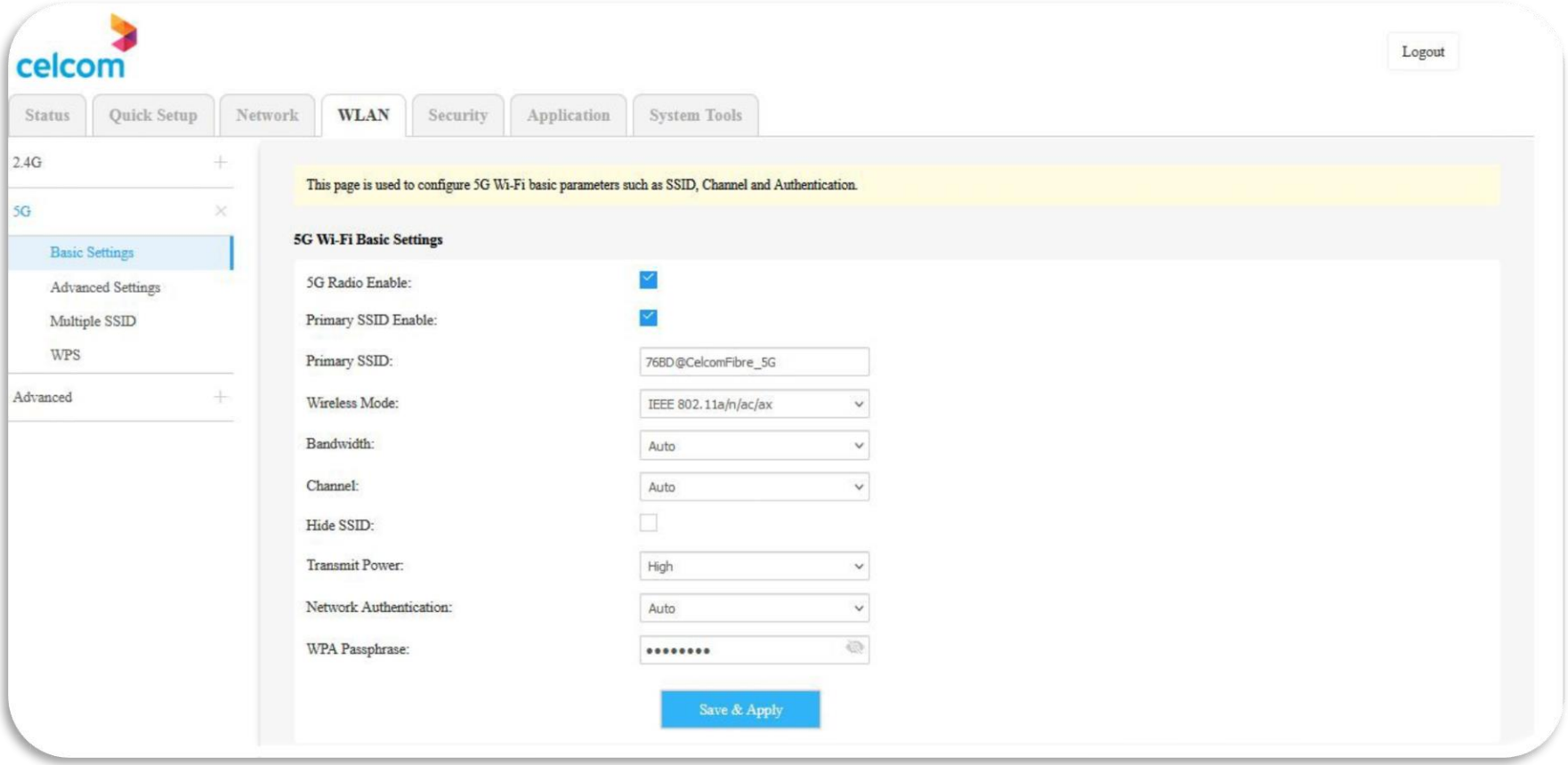
Wireless Configuration - 5GHz Setup

1) You can edit the 5GHz wireless settings by accessing the 5G sub menu
2) Once you access the page, you will see and able to edit the 5GHz wireless SSID name and password passphrase.
3) Click on Save & Apply when the setting is done



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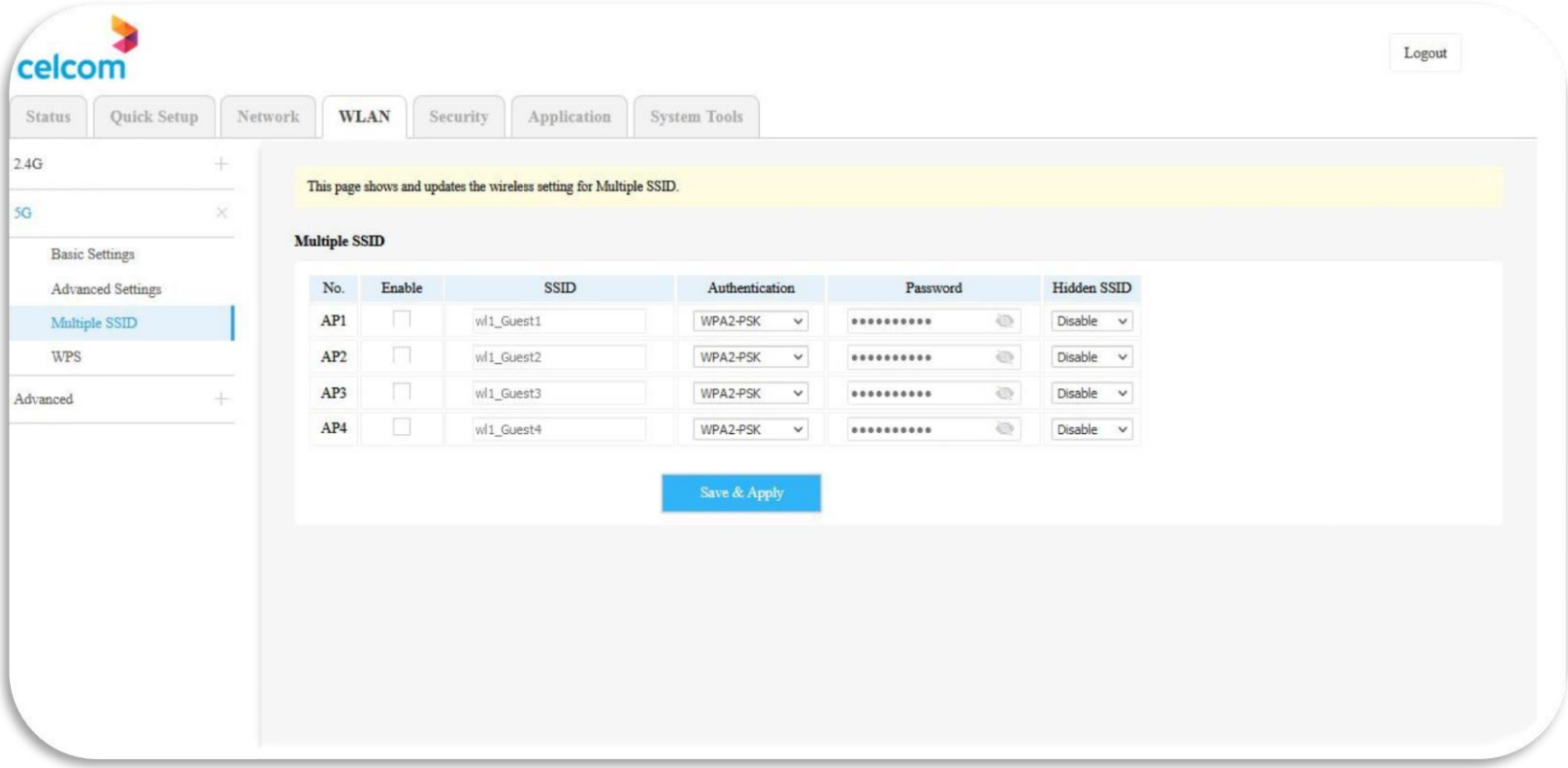
Wireless Configuration - 5GHz Setup

4) You can add multiple guest SSID in the Multiple SSID for 5GHz wireless
5) Check the box on the left and configure the SSID wireless name and Password
6) Then click on Save & Apply



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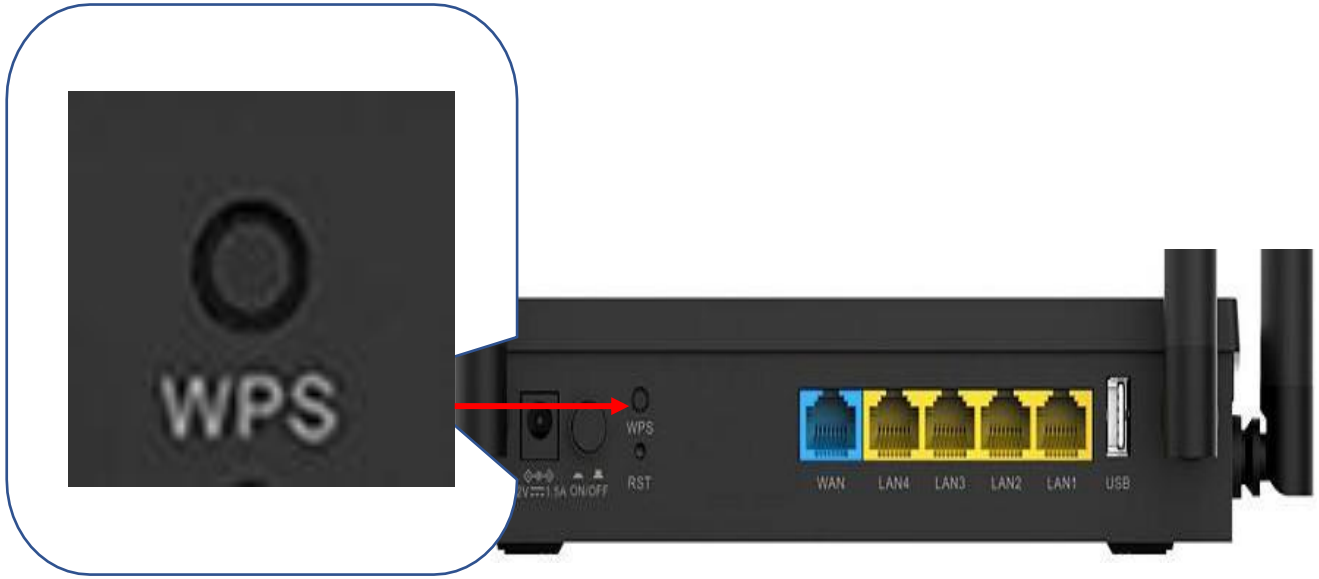
MESH CONFIGURATION

MESH Configuration

1) For Mesh configuration, you will find the WPS button at the rear of the router next to the ON/Off switch
2) Press on the WPS button for about 3 seconds and the WPS LED will start to blink on both main router and the Mesh AP

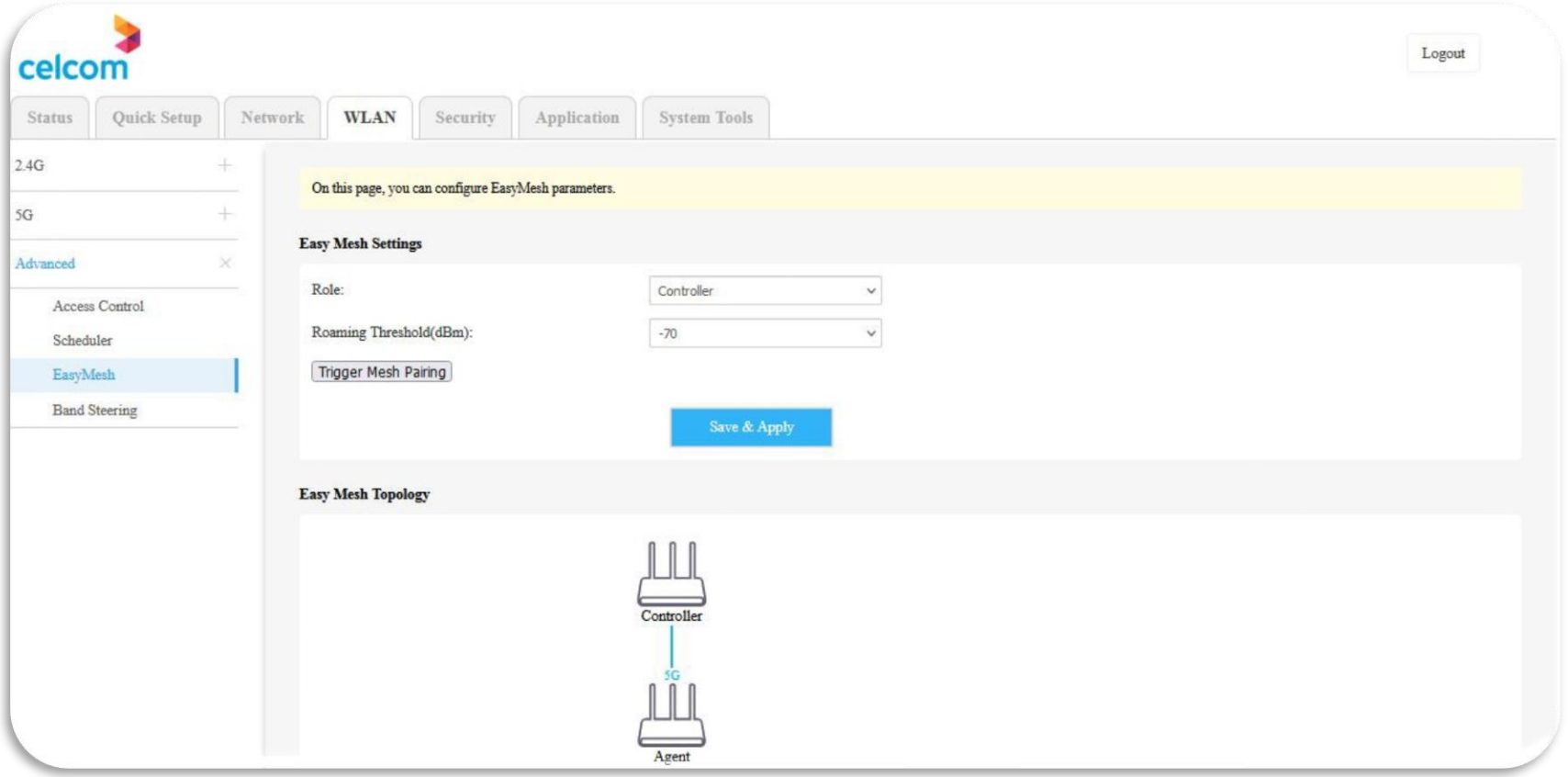


MESH Configuration

3) When the WPS stop blinking and stay solid light on, the Mesh connection between the main router and Mesh AP is established successfully

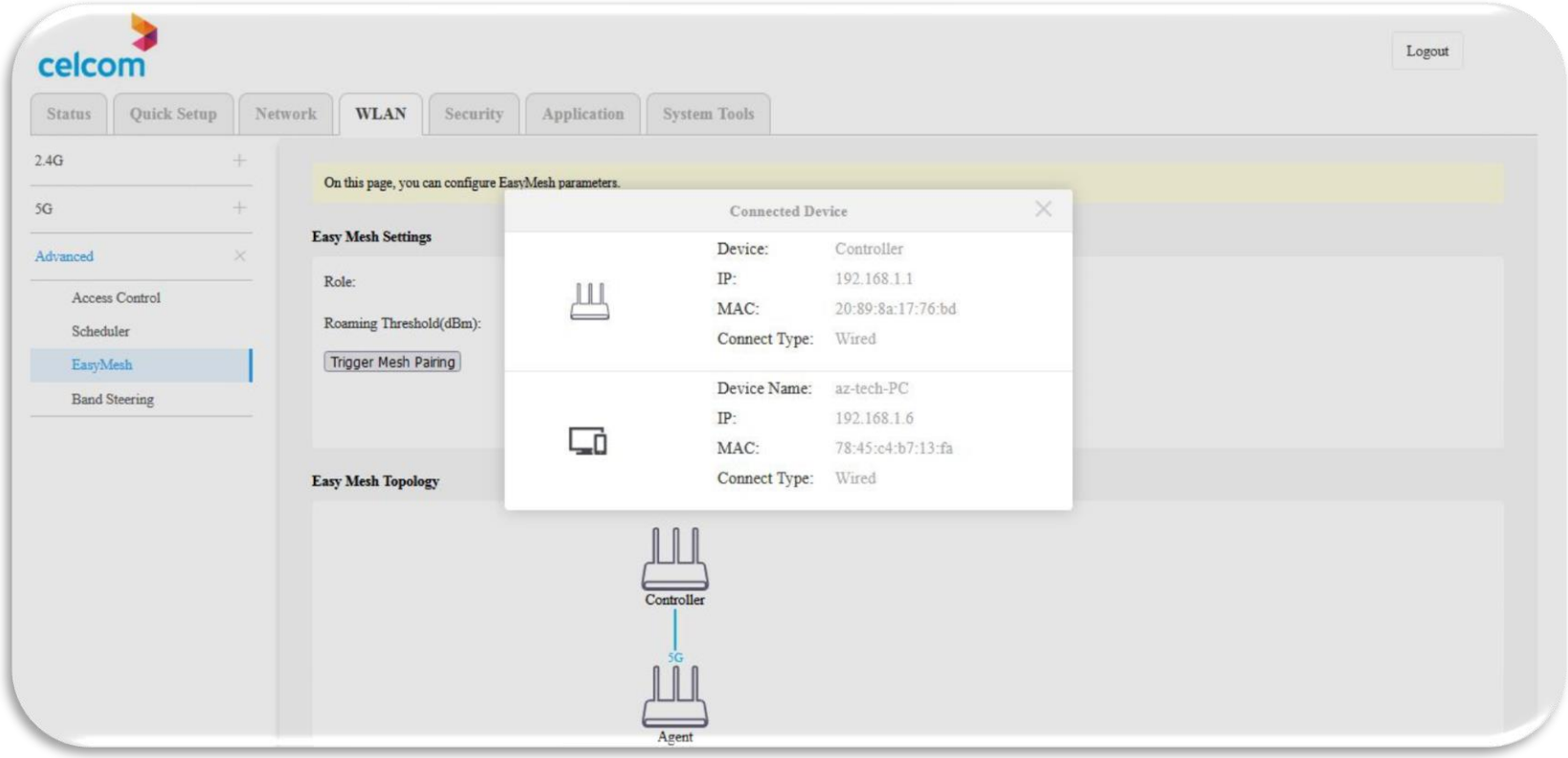
MESH Configuration

1) You can see the topology of the Main router (Controller) and the Mesh AP (Agent)
2) Click on WLAN on the top menu
3) Click on Advanced on the left sub menu and click on EasyMesh



MESH Configuration

4) When you click on the Controller router icon, you will see the information of the device that is connected to the main router



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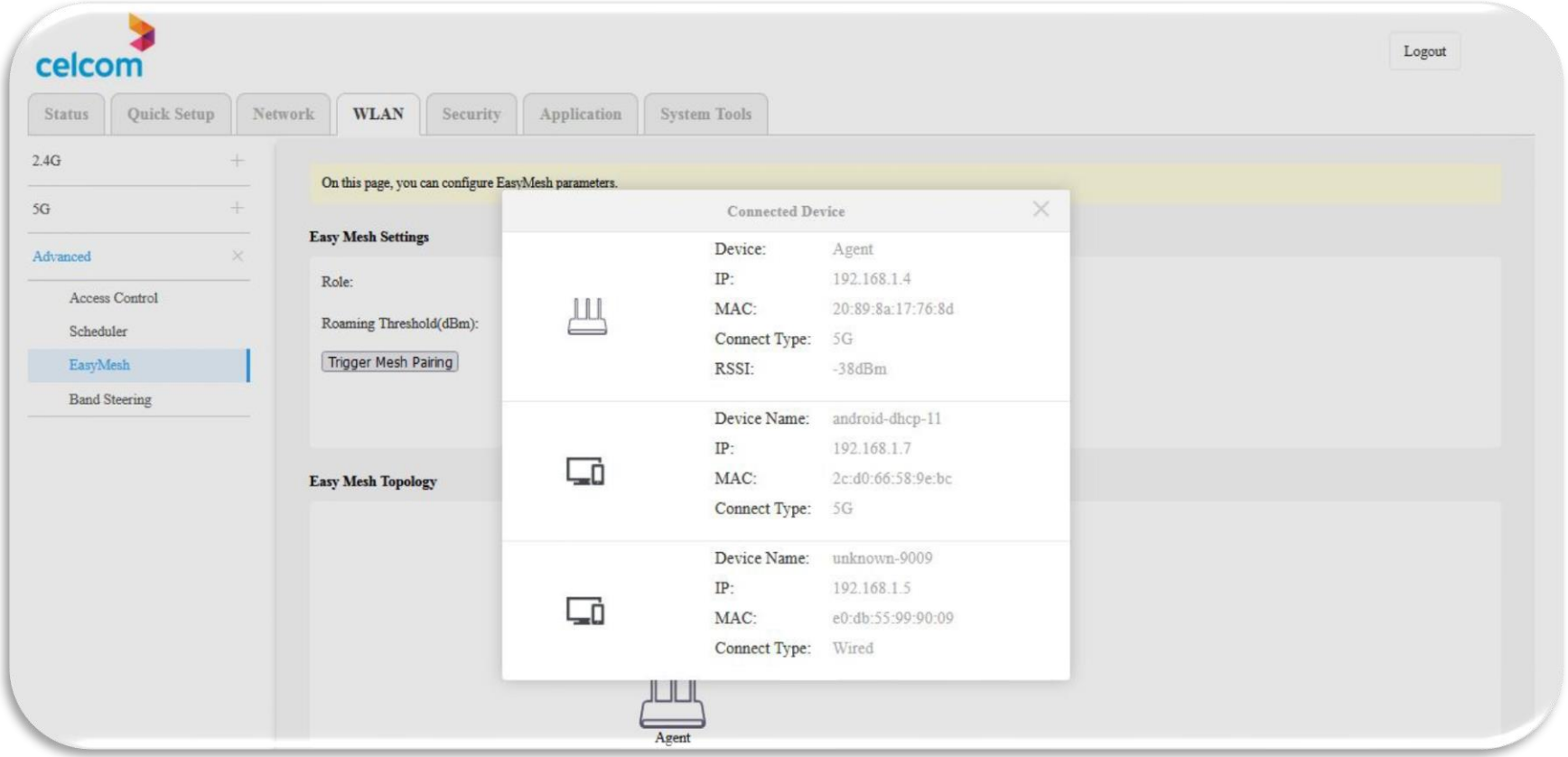
MESH Configuration

5) When you click on the Agent router icon, you will see the information of the device that is connected to the Mesh AP



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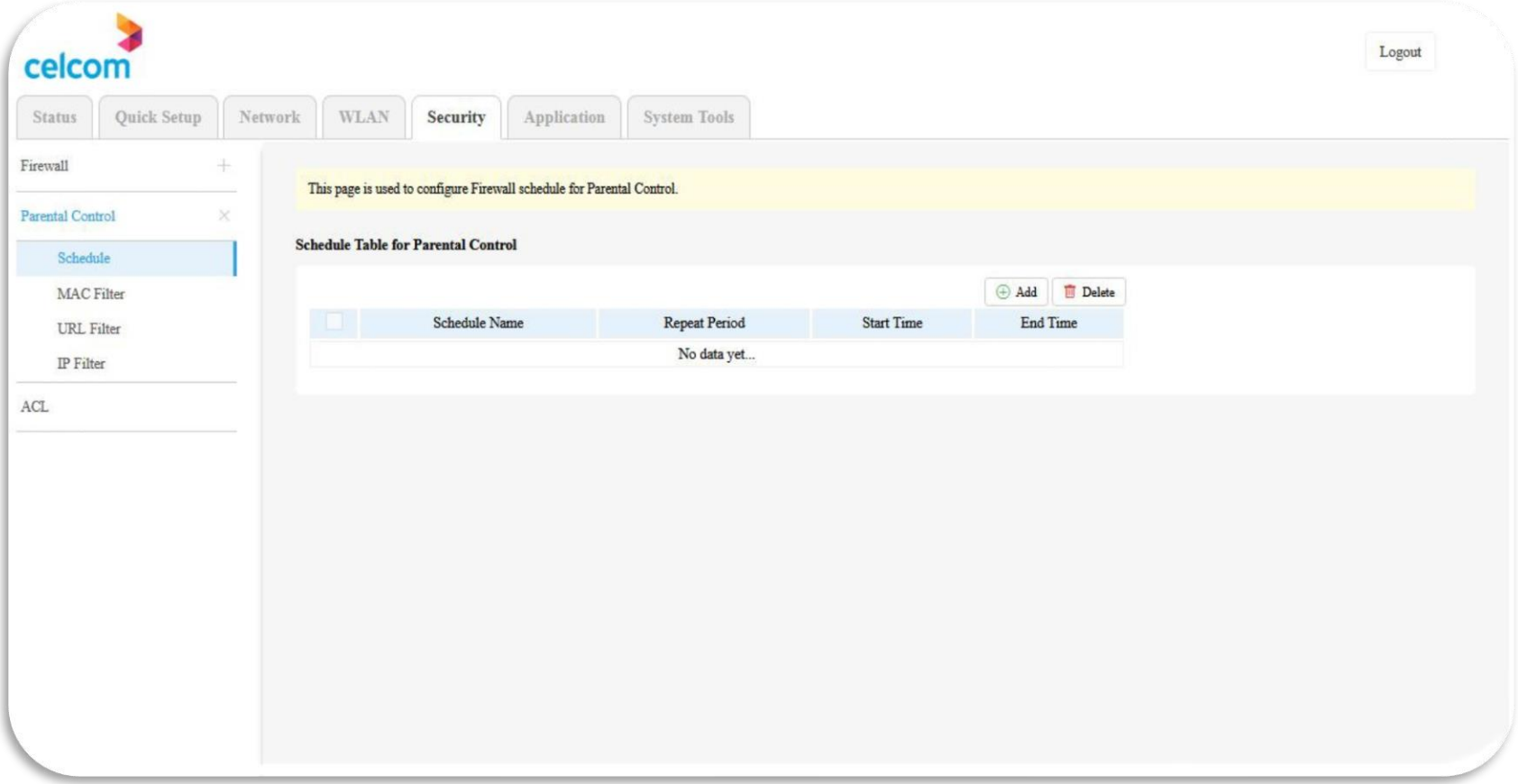
SECURITY – PARENTAL CONTROL

- Schedule Setup
- MAC Filter Setup
- URL & Keyword Filter Setup
- IP Filter Setup

Security – Parental Control – Schedule Setup

1) For parental control security configuration, you need to configure the time/day to block the internet connection.
2) Click on Schedule in the Parental Control sub menu
3) Then click on the Add button at the top right



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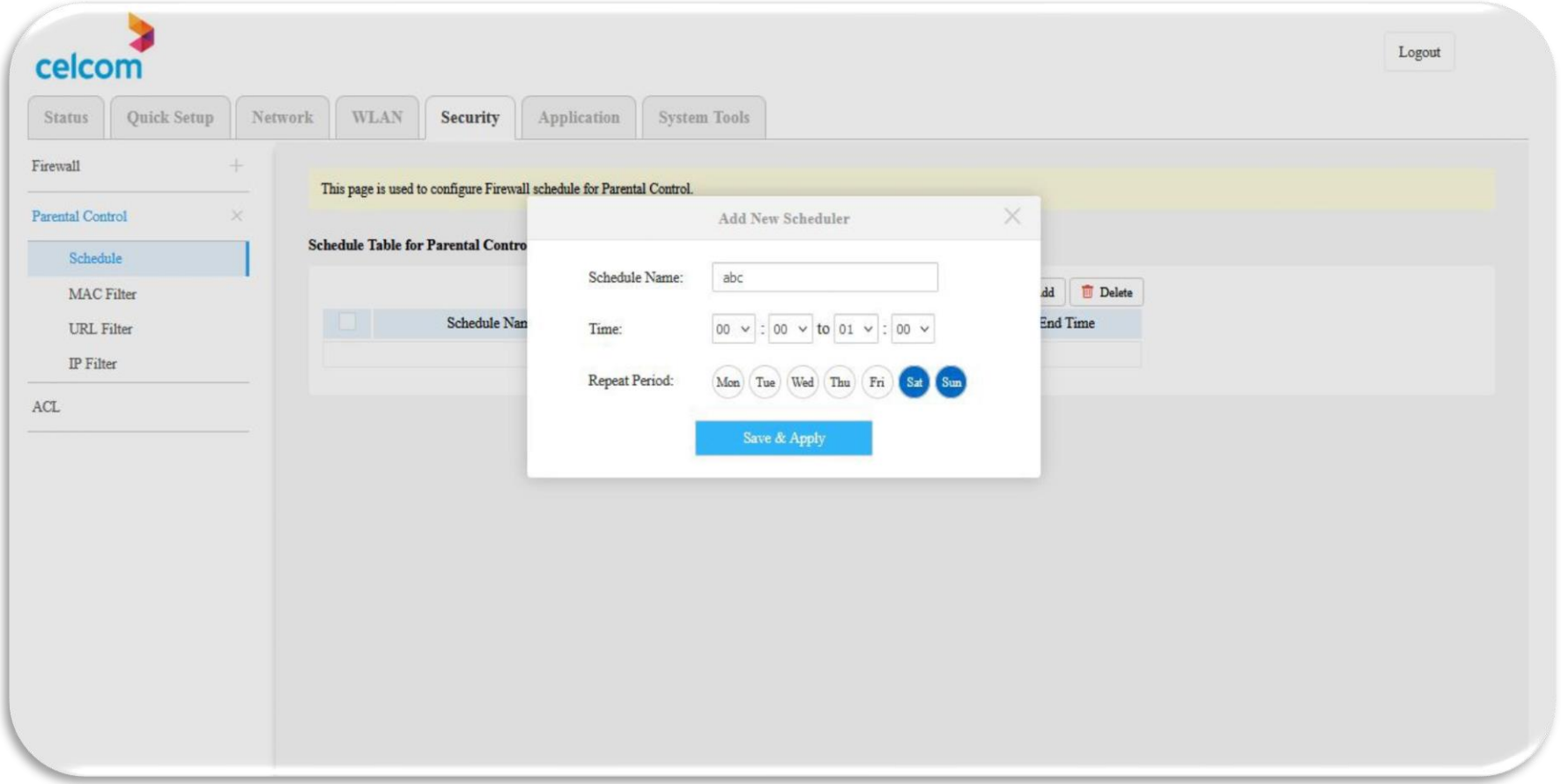
Security – Parental Control – Schedule Setup

4) Create a Schedule Rule Name and configure the Time and Repeat Period for the internet access block
5) Click on Save & Apply



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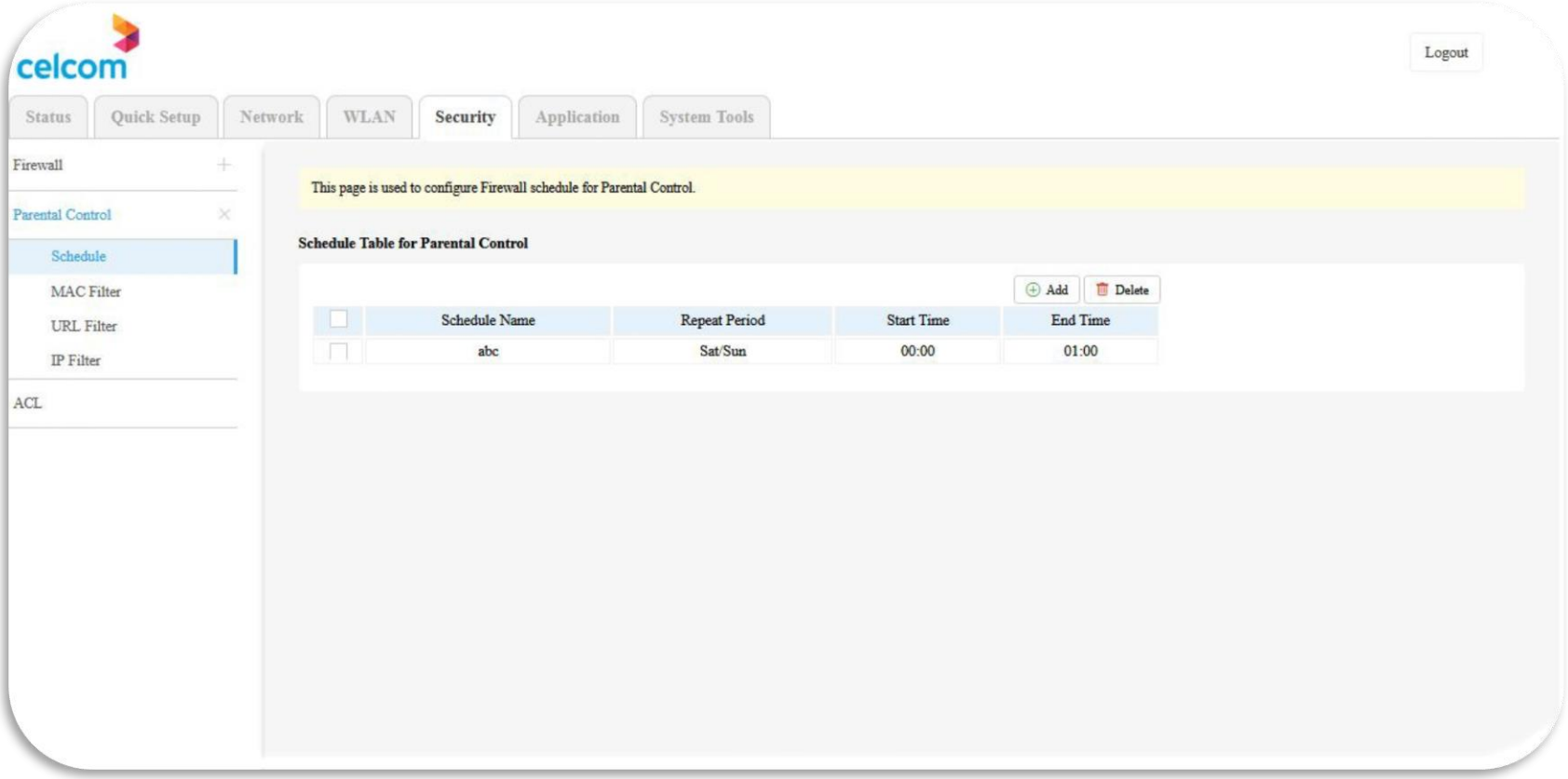
Security – Parental Control – Schedule Setup

6) The Schedule entry will be added in the list



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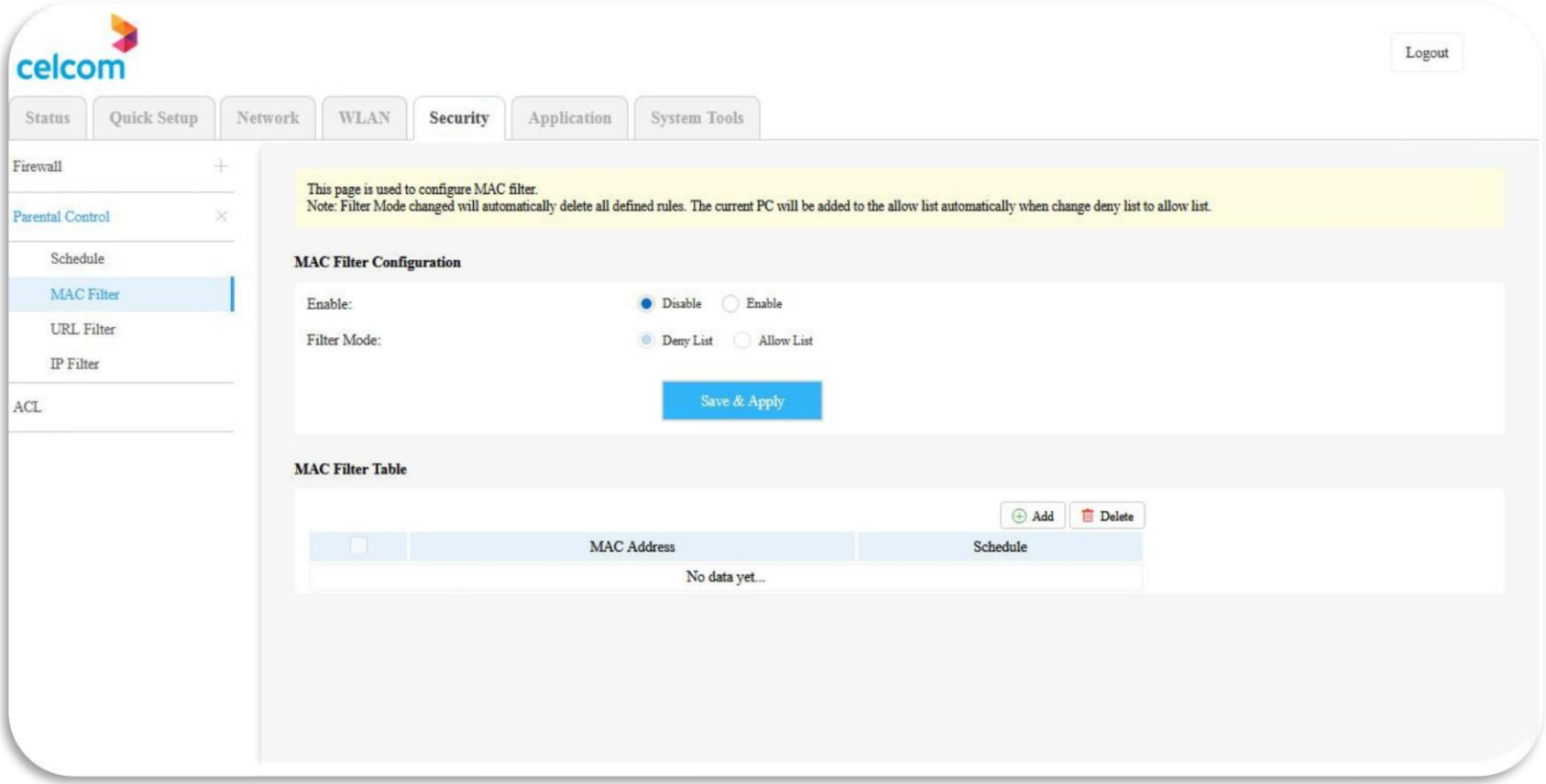
MAC FILTER SETUP

Security – Parental Control – MAC Filter Setup

1) Click on MAC Filter and select Enable
2) Then click Save & Apply



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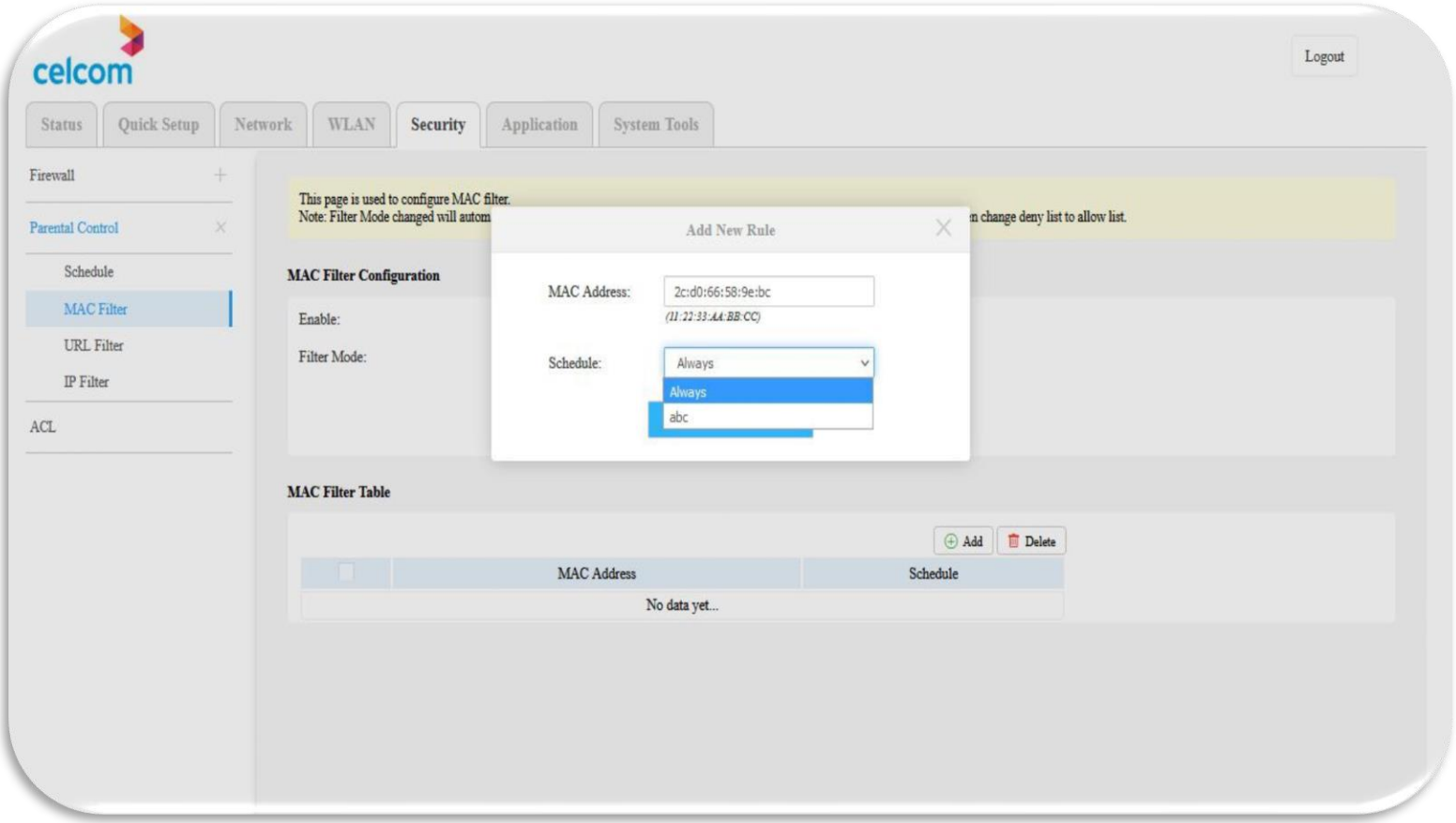
Security – Parental Control – MAC Filter Setup

3) Click on the Add button and key-in the existing MAC Address that need to be block
4) Next, select the Schedule as "Always" to block all-time or select the Schedule Rule Name of the selected time/day of internet block
5) Click on Save & Apply



Note : You may get the MAC Address from the Status page (LAN Info => Connected Device Info)

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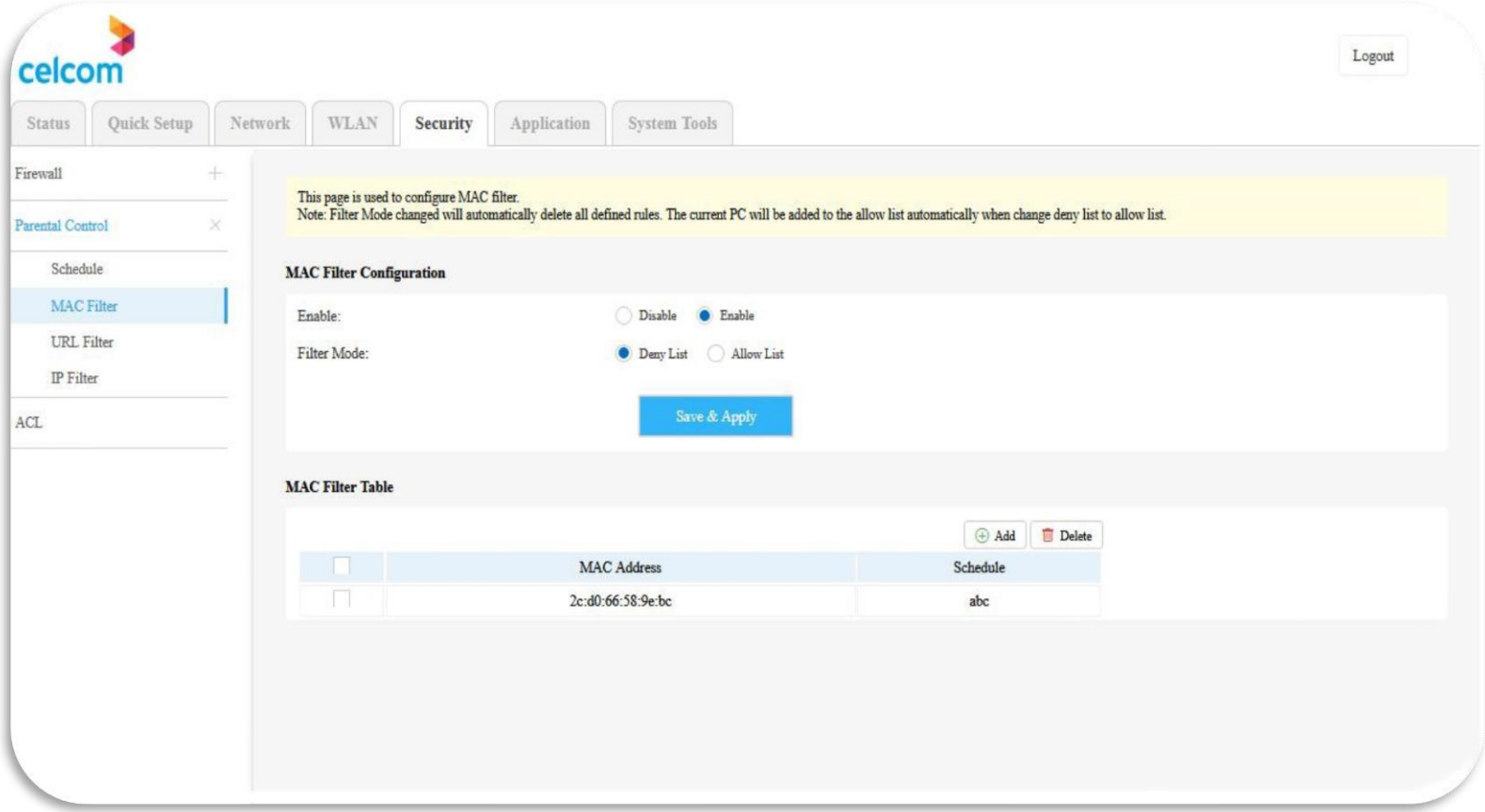
Security – Parental Control – MAC Filter Setup

6) The MAC Filter entry will be added in the list



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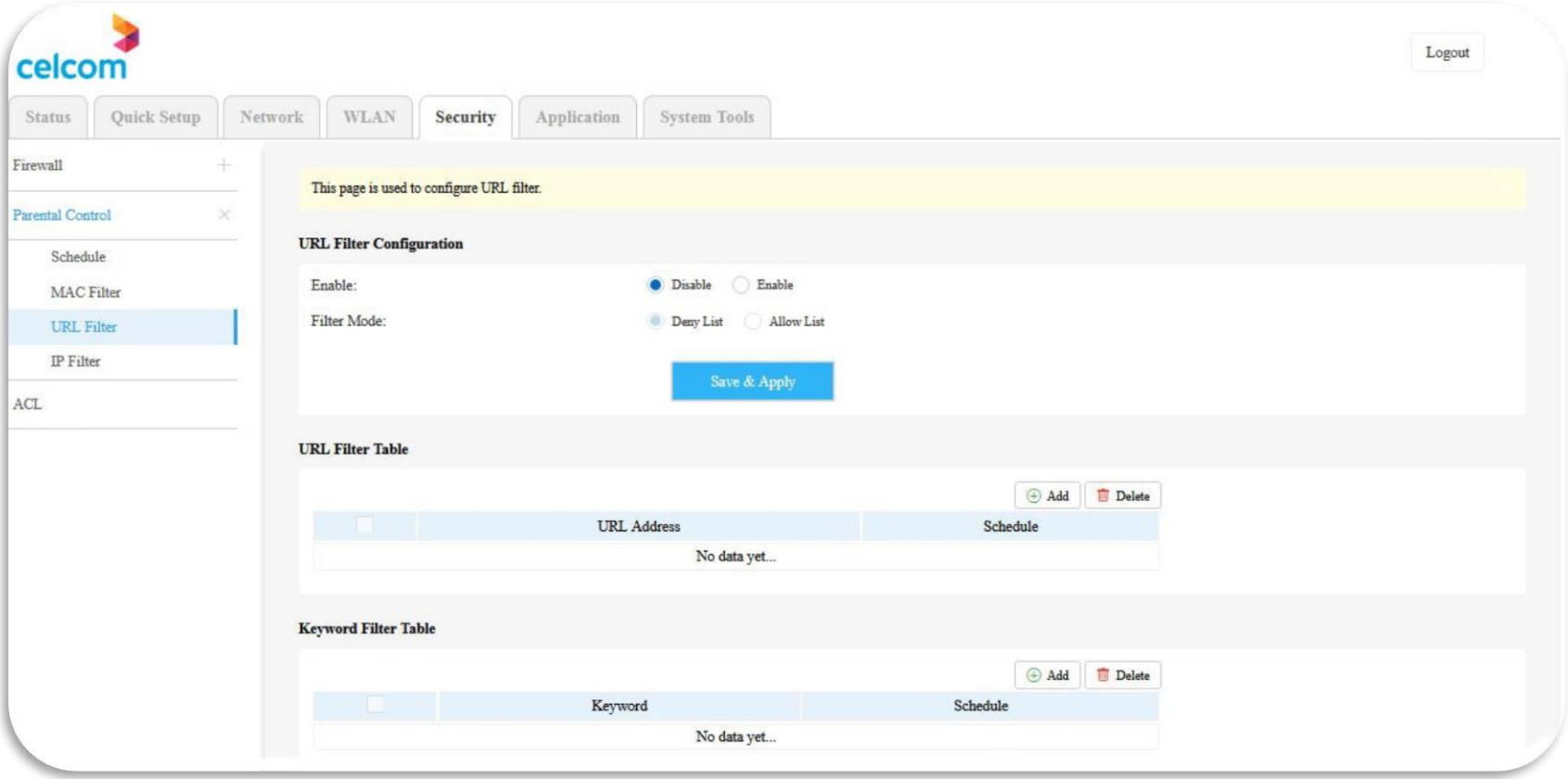
URL & Keyword Filter Setup

Security – Parental Control – URL & Keyword Filter Setup

1) For URL Filter, click on URL Filter and select Enable
2) Then click Save & Apply



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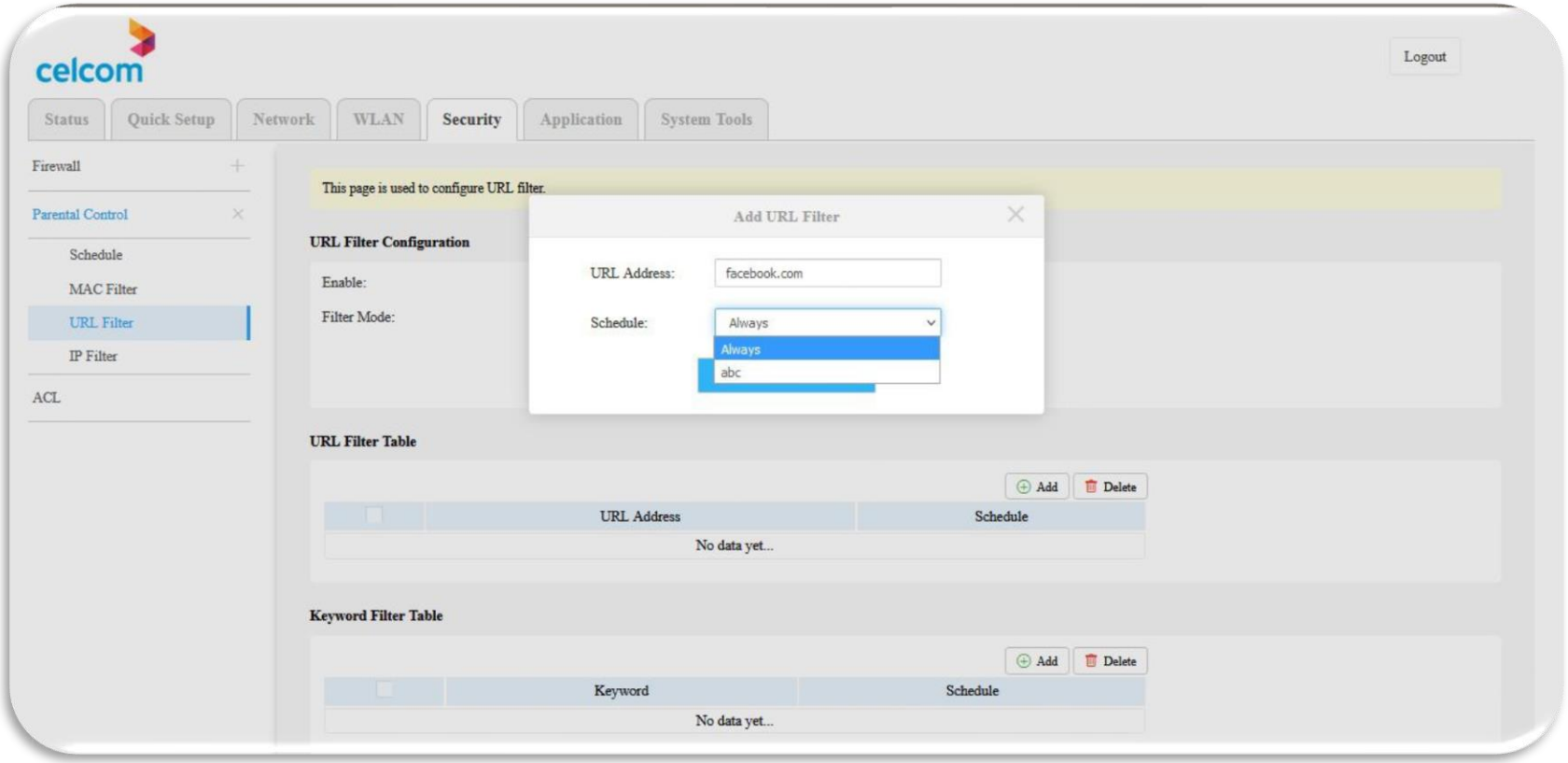
Security – Parental Control – URL & Keyword Filter Setup

3) Click on the Add button and key-in the URL address that need to be block
4) Next, select the Schedule as "Always" to block all-time or select the Schedule Rule Name of the selected time/day of internet block
5) Click on Save & Apply



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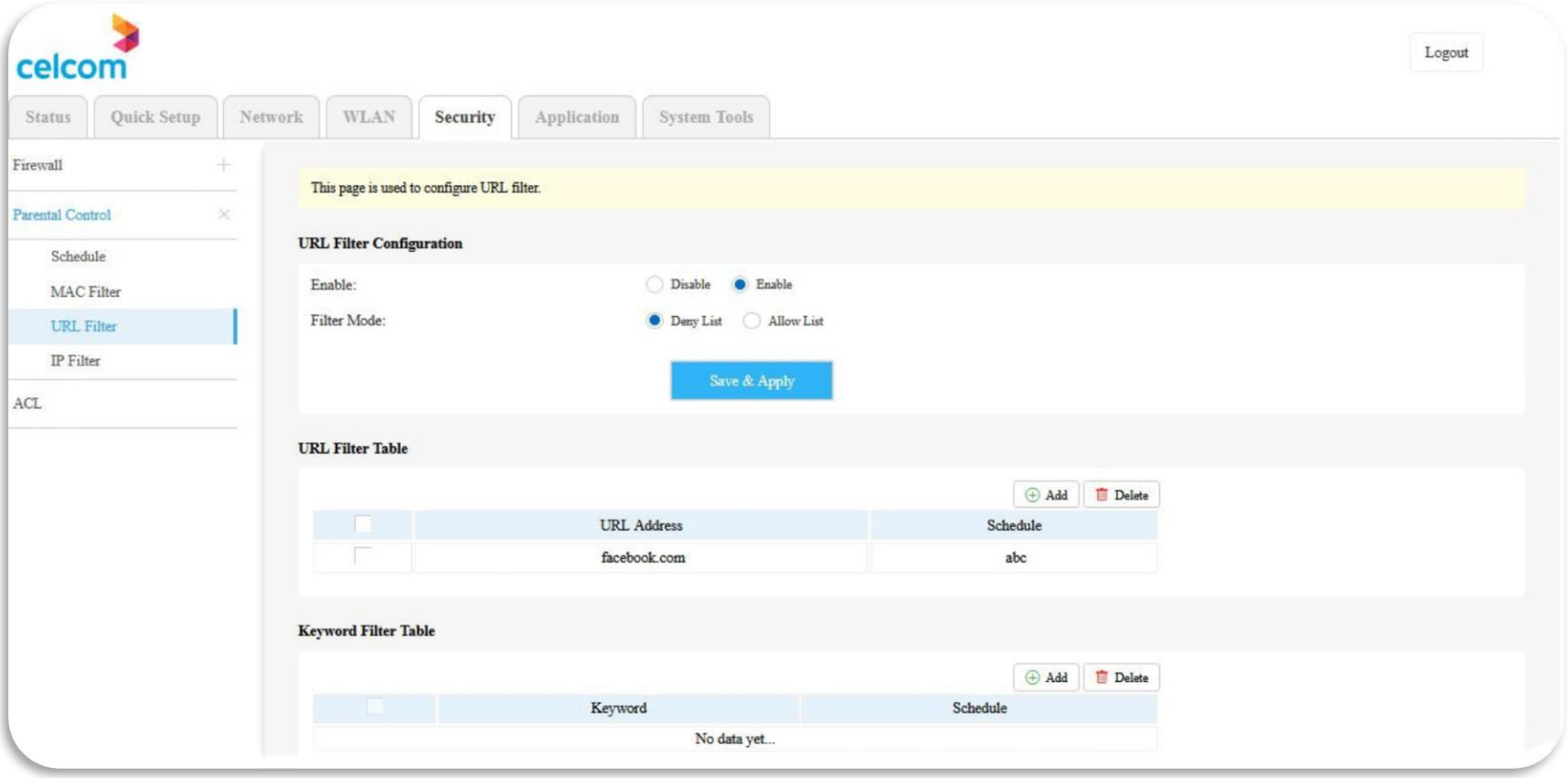
Security – Parental Control – URL & Keyword Filter Setup

6) The URL Filter entry will be added in the list



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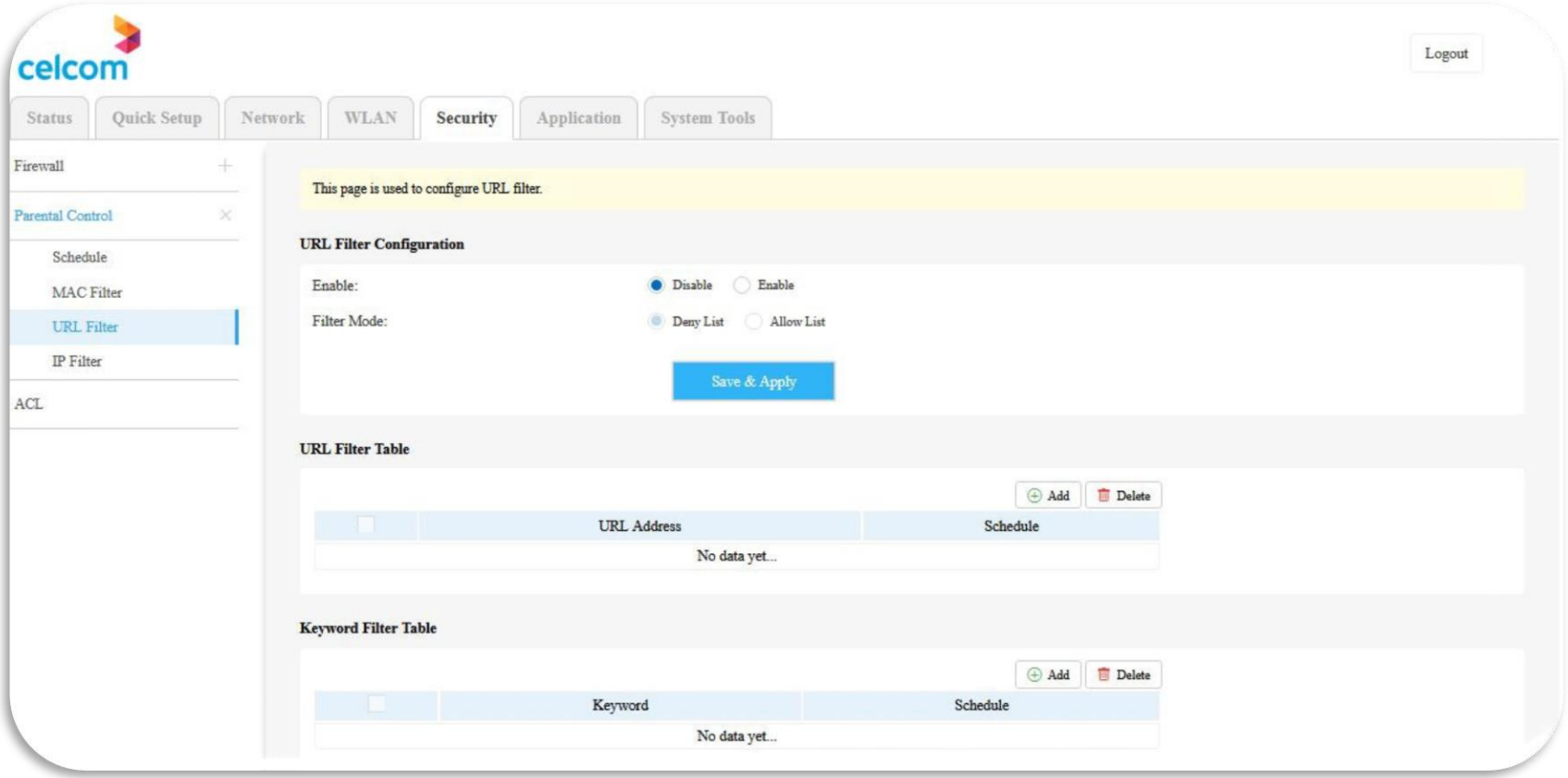
Security – Parental Control – URL & Keyword Filter Setup

7) For Keyword Filter, click on URL Filter and select Enable
8) Then click Save & Apply



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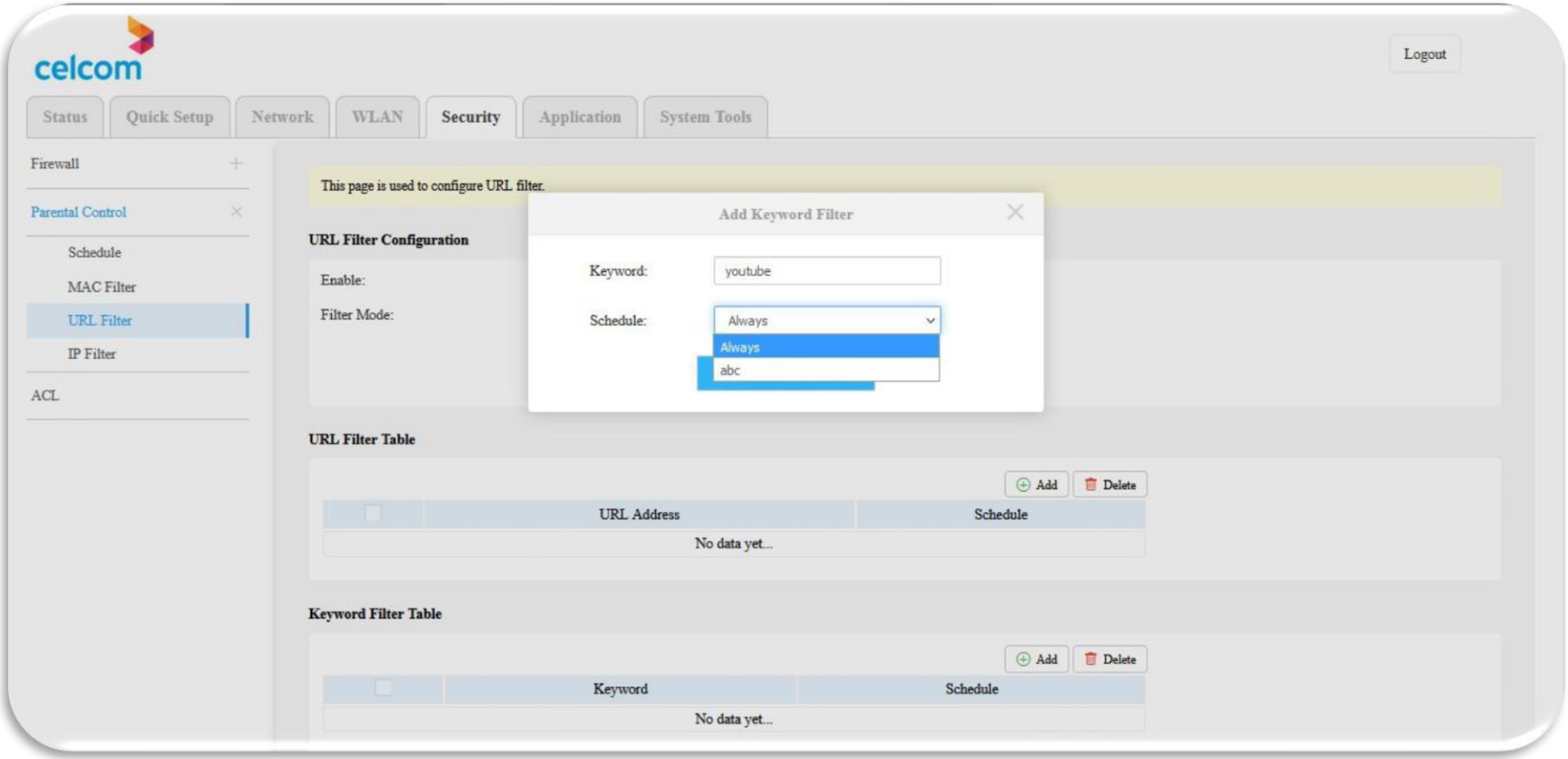
Security – Parental Control – URL & Keyword Filter Setup

9) Click on the Add button and key-in the Keyword that need to be block
10) Next, select the Schedule as "Always" to block all-time or select the Schedule Rule Name of the selected time/day of internet block
11) Click on Save & Apply



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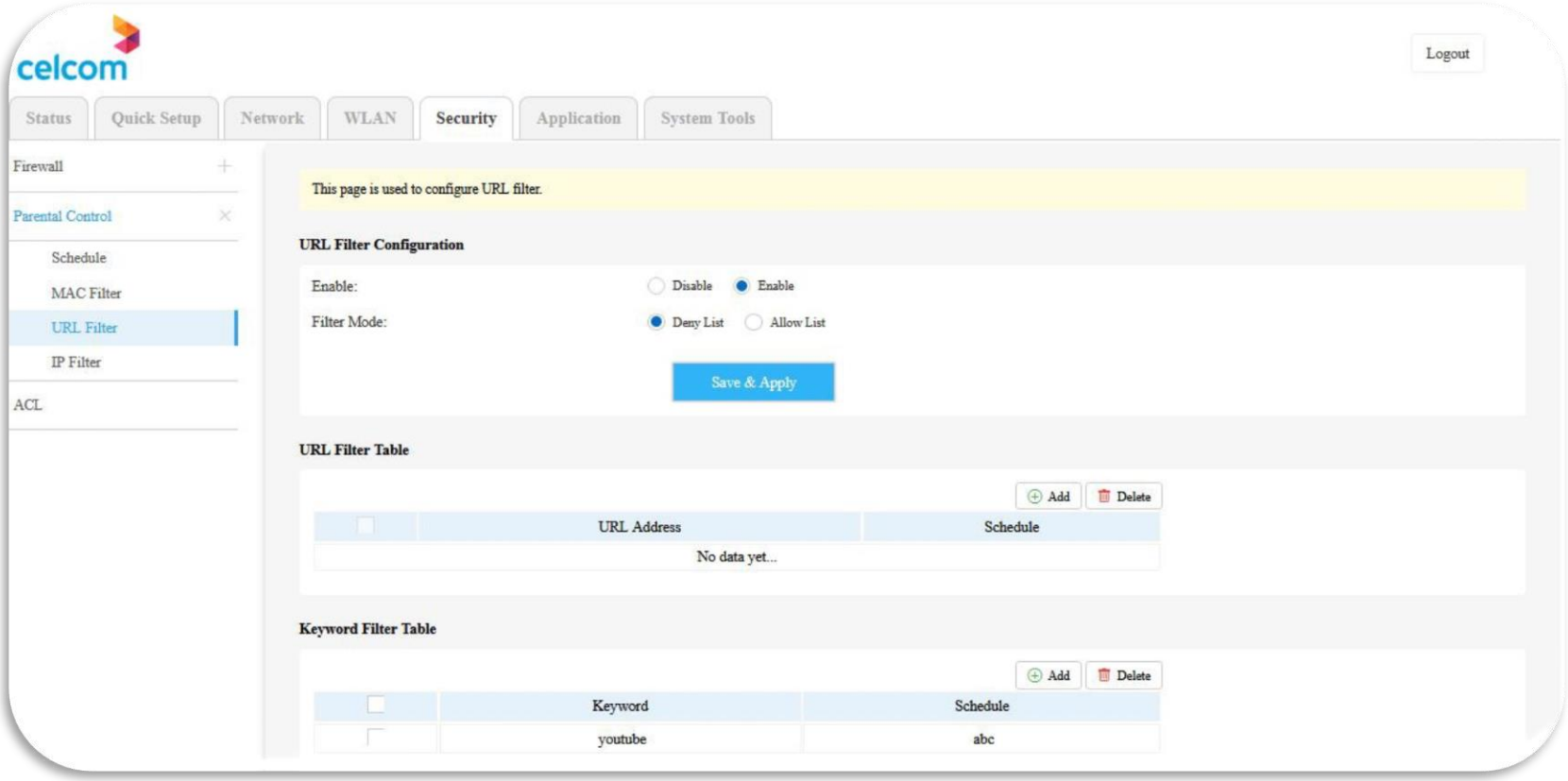
Security – Parental Control – URL & Keyword Filter Setup

12) The Keyword Filter entry will be added in the list



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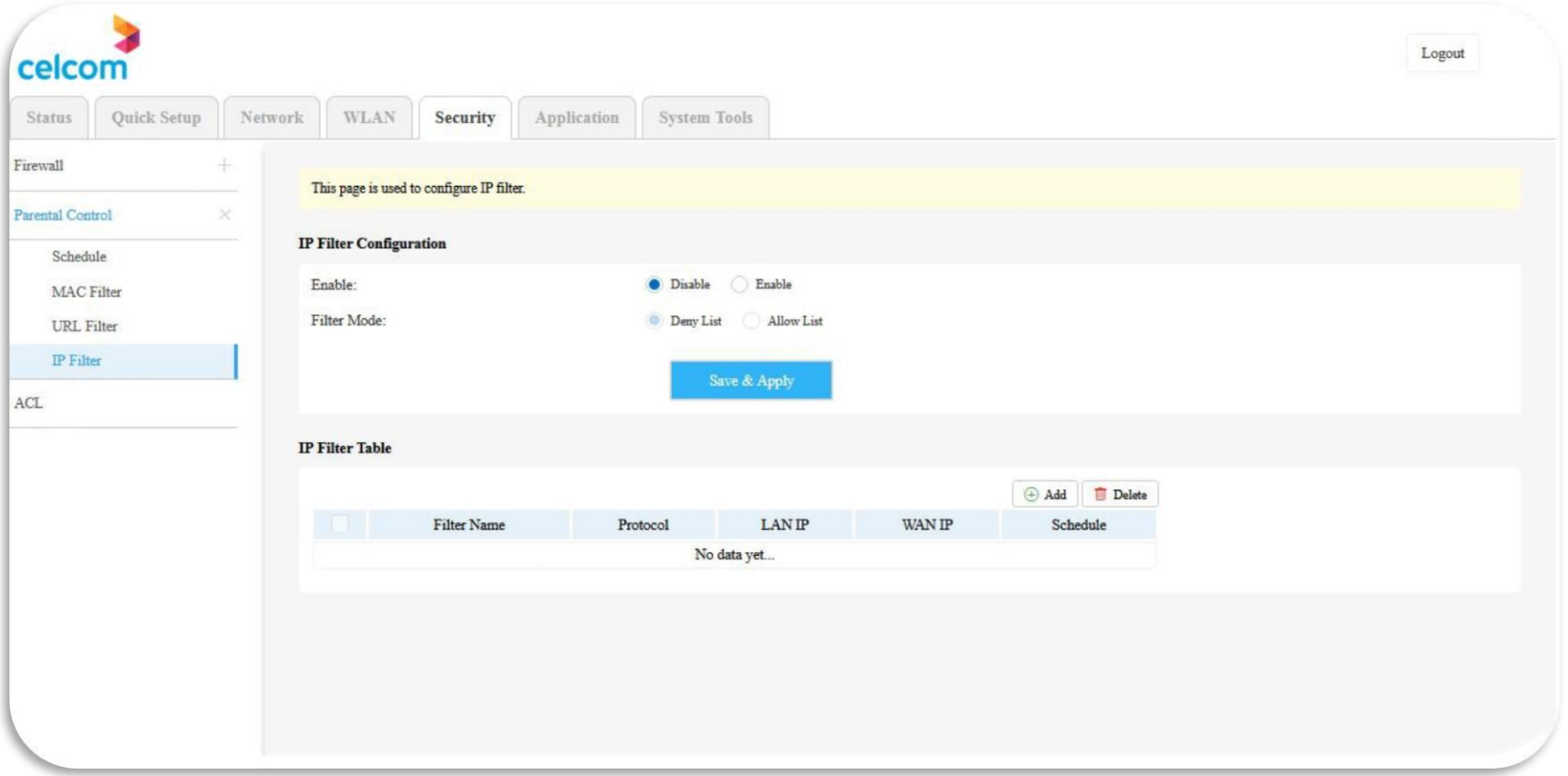
IP Filter Setup

Security – Parental Control – IP Filter Setup

1) For IP Filter, click on IP Filter and select Enable
2) Then click Save & Apply



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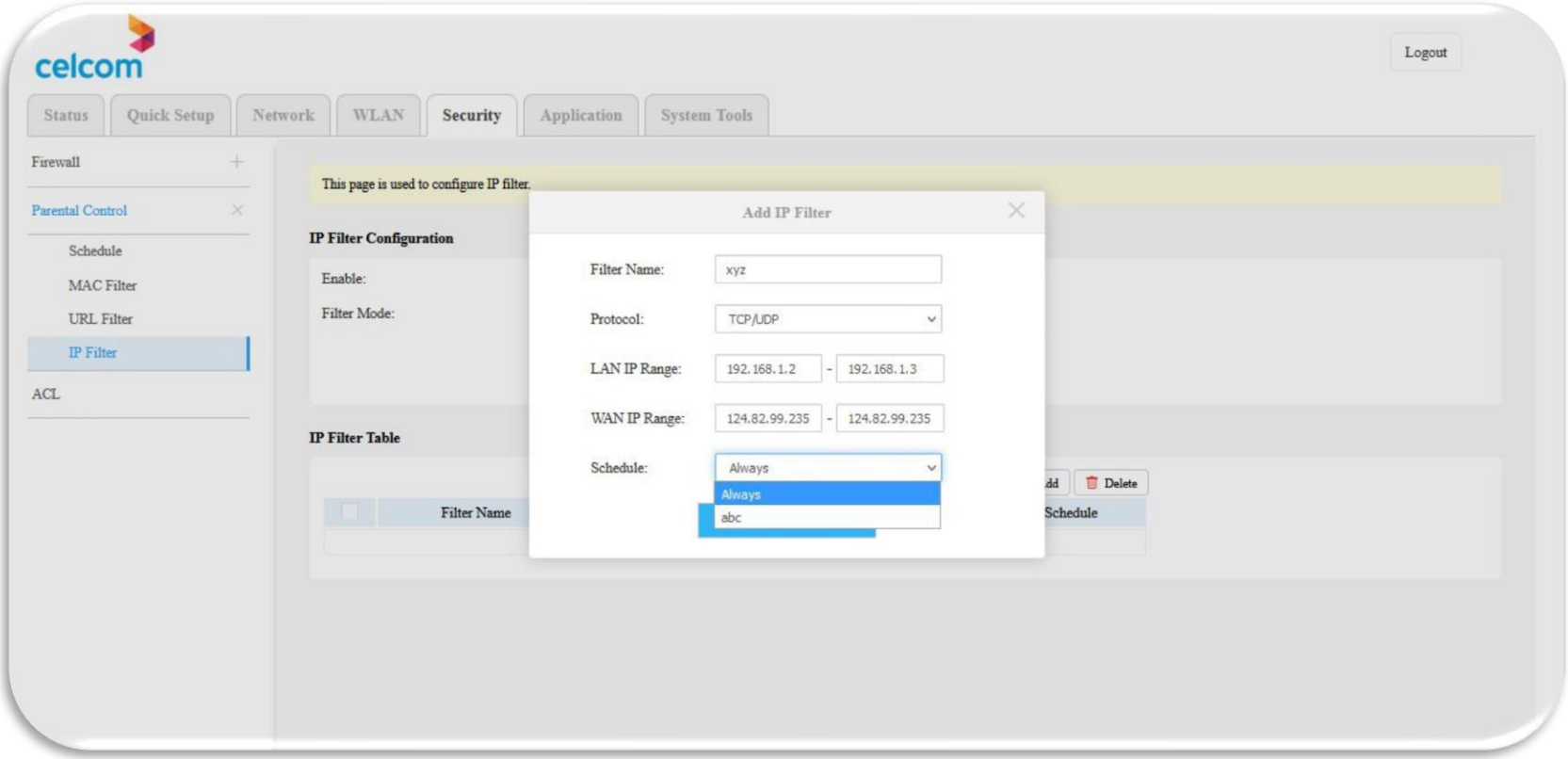
Security – Parental Control – IP Filter Setup

3) Click on the Add button and create a Filter Rule Name
4) Next, key-in the IP addresses that need to be block
5) Next, select the Schedule as "Always" to block all-time or select the Schedule Rule Name of the selected time/day of internet block
6) Click on Save & Apply



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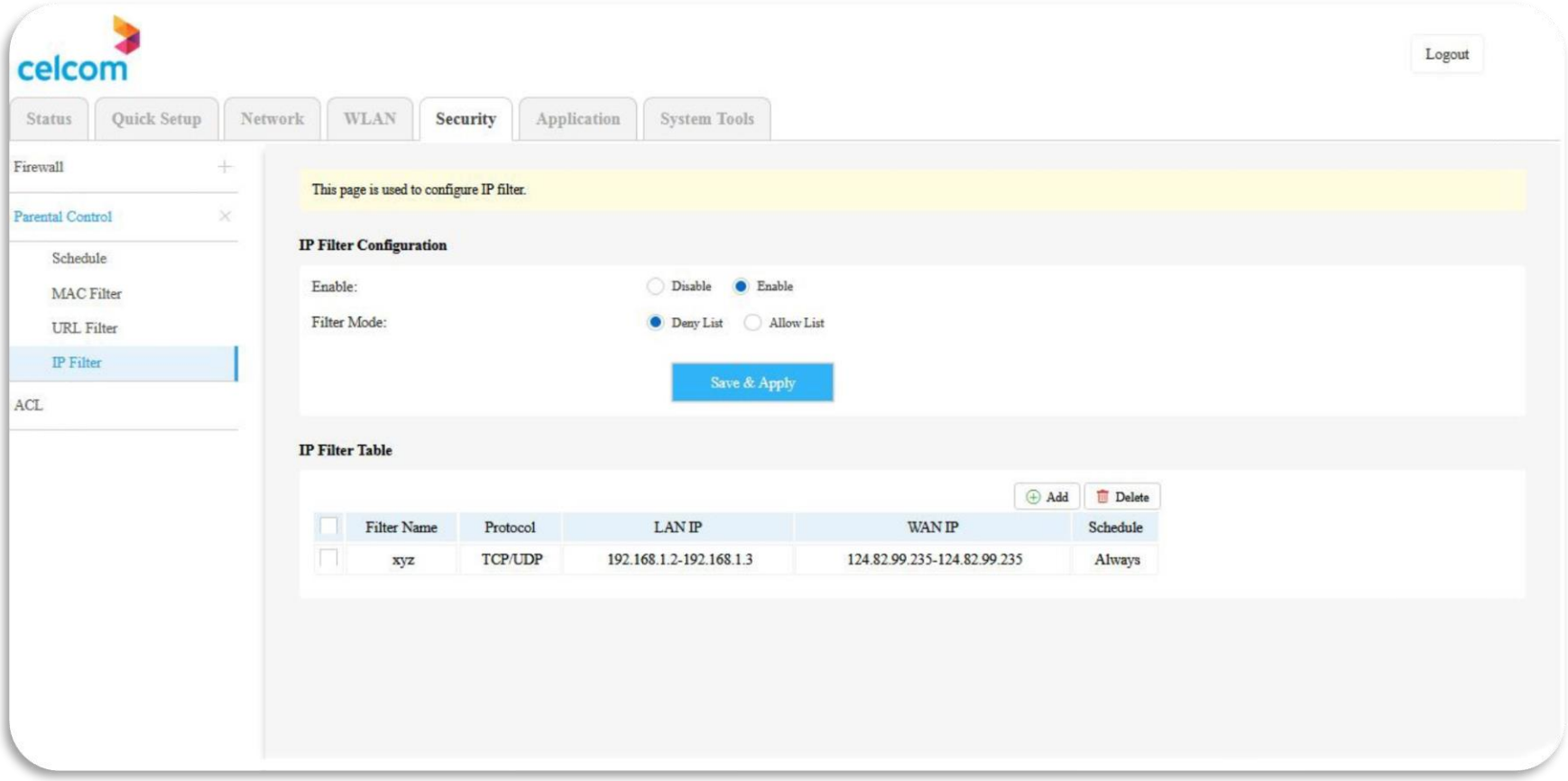
Security – Parental Control – IP Filter Setup

7) The IP Filter entry will be added in the list

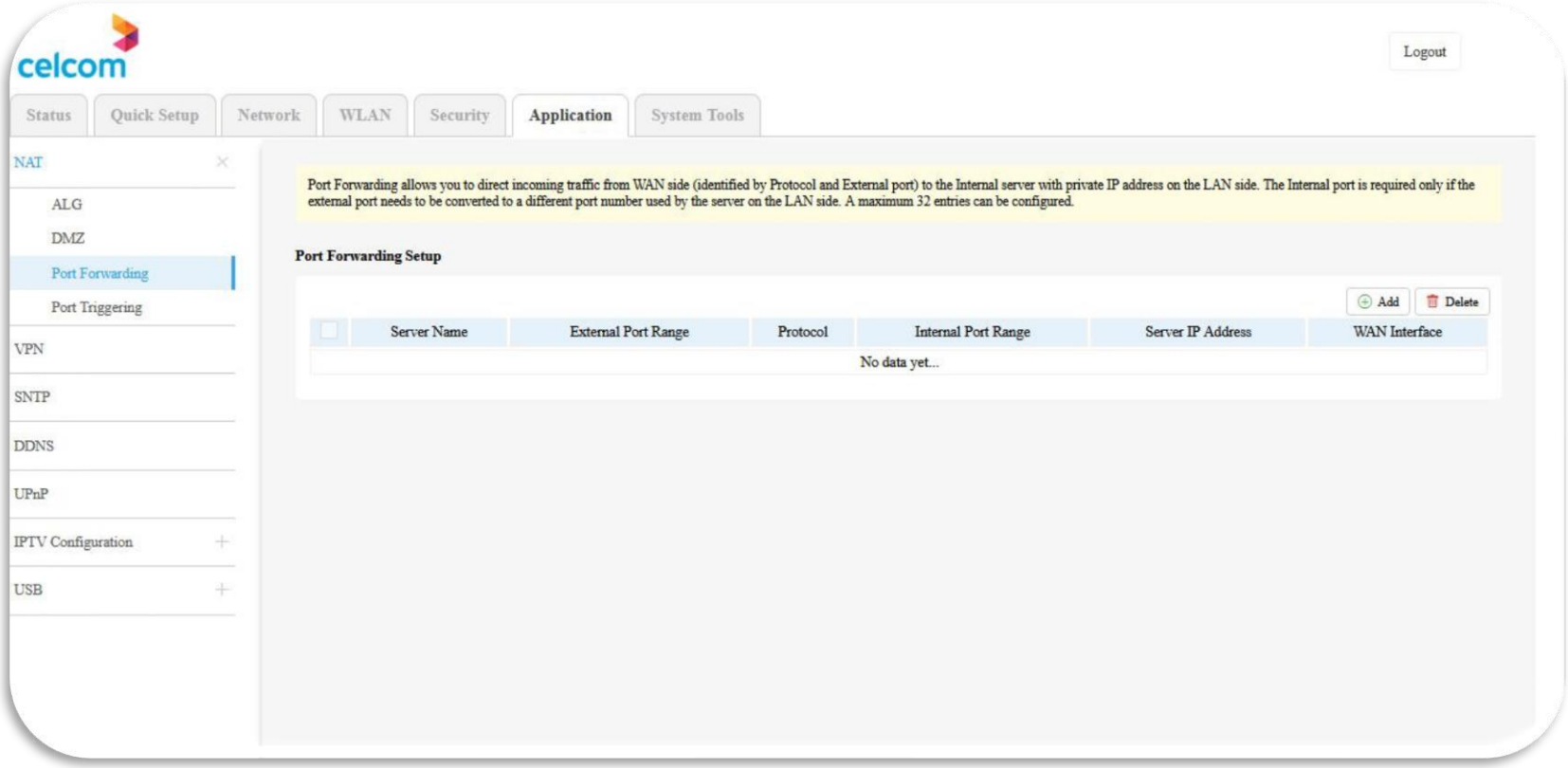


APPLICATION & FEATURES

- Port Forwarding Setup
- Dynamic DNS Setup

Application and Features – Port Forwarding Setup

1) Click on Application on the top menu and click on NAT on the left sub menu
2) Click on Port Forwarding and the port forwarding will be display



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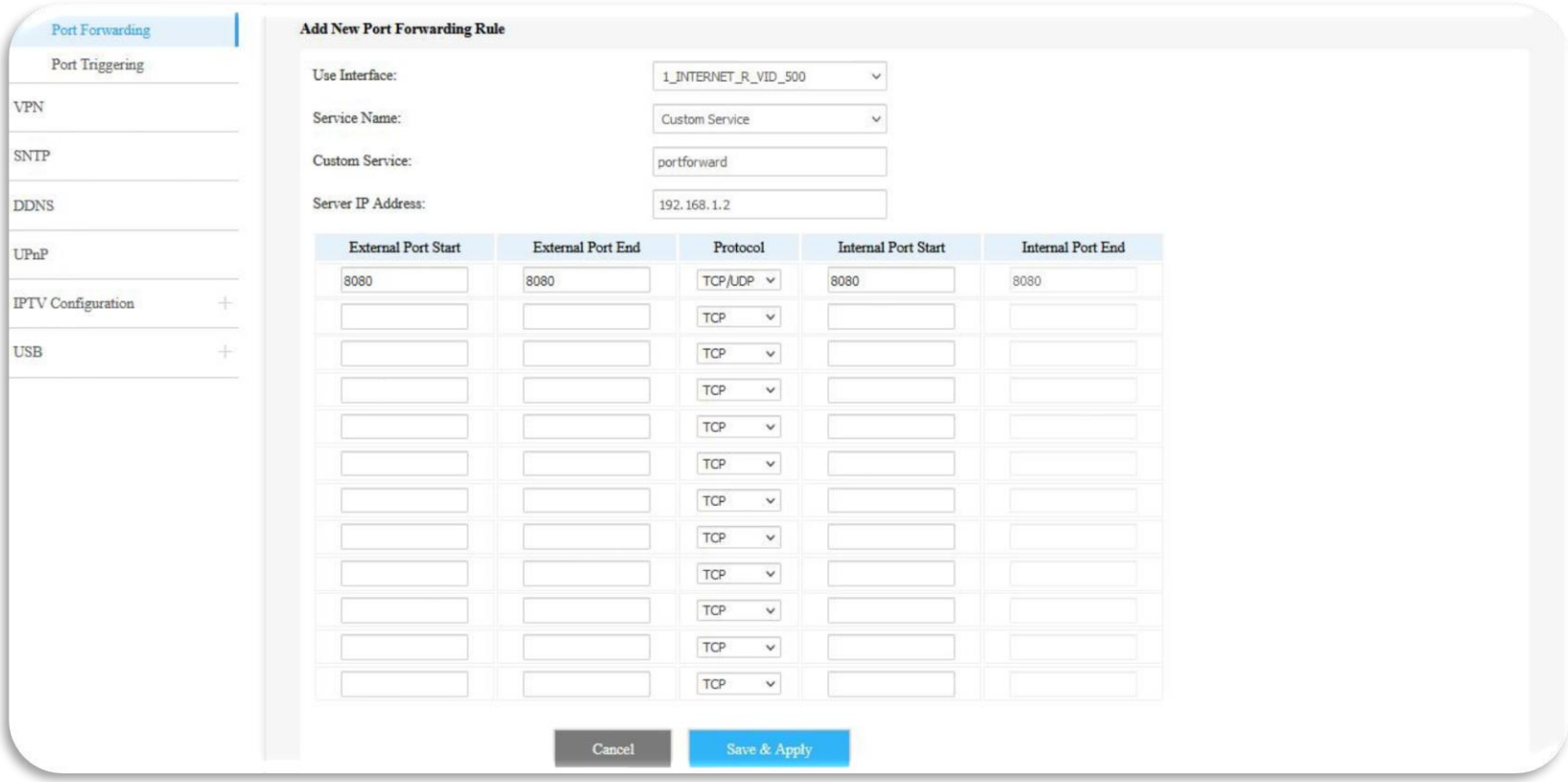
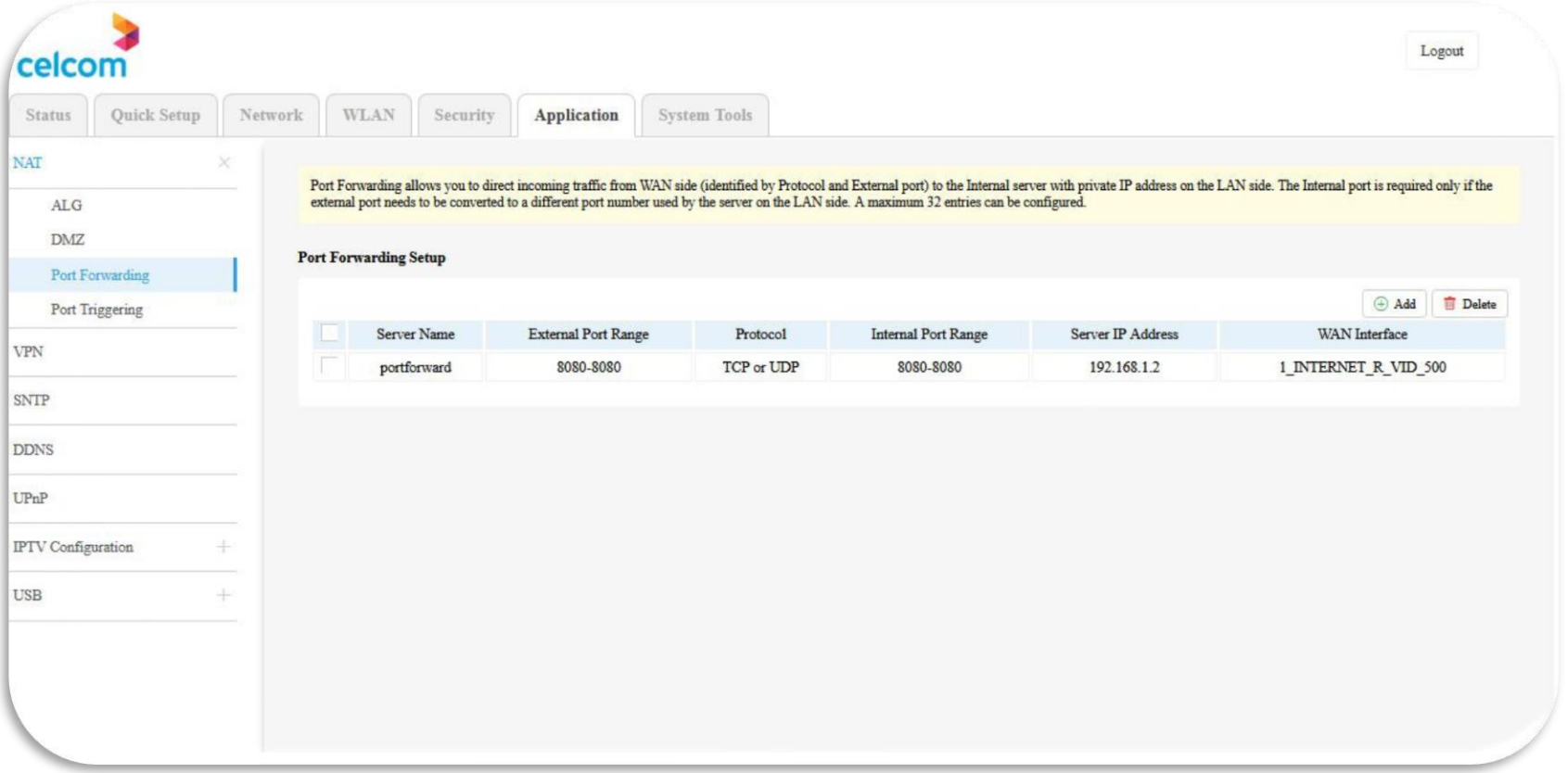
Application and Features – Port Forwarding Setup

1) Click on the Add button and change the Interface to Internet Interface
2) Create a custom rule name for Custom Service name
3) Next, key-in the IP Address of the device that need to port forward
4) Fill-in the Port number of the device and change the Protocol to TCP/UDP
5) Click on Save & Apply



Application and Features – Port Forwarding Setup

6) The Port Forwarding entry will be added in the list



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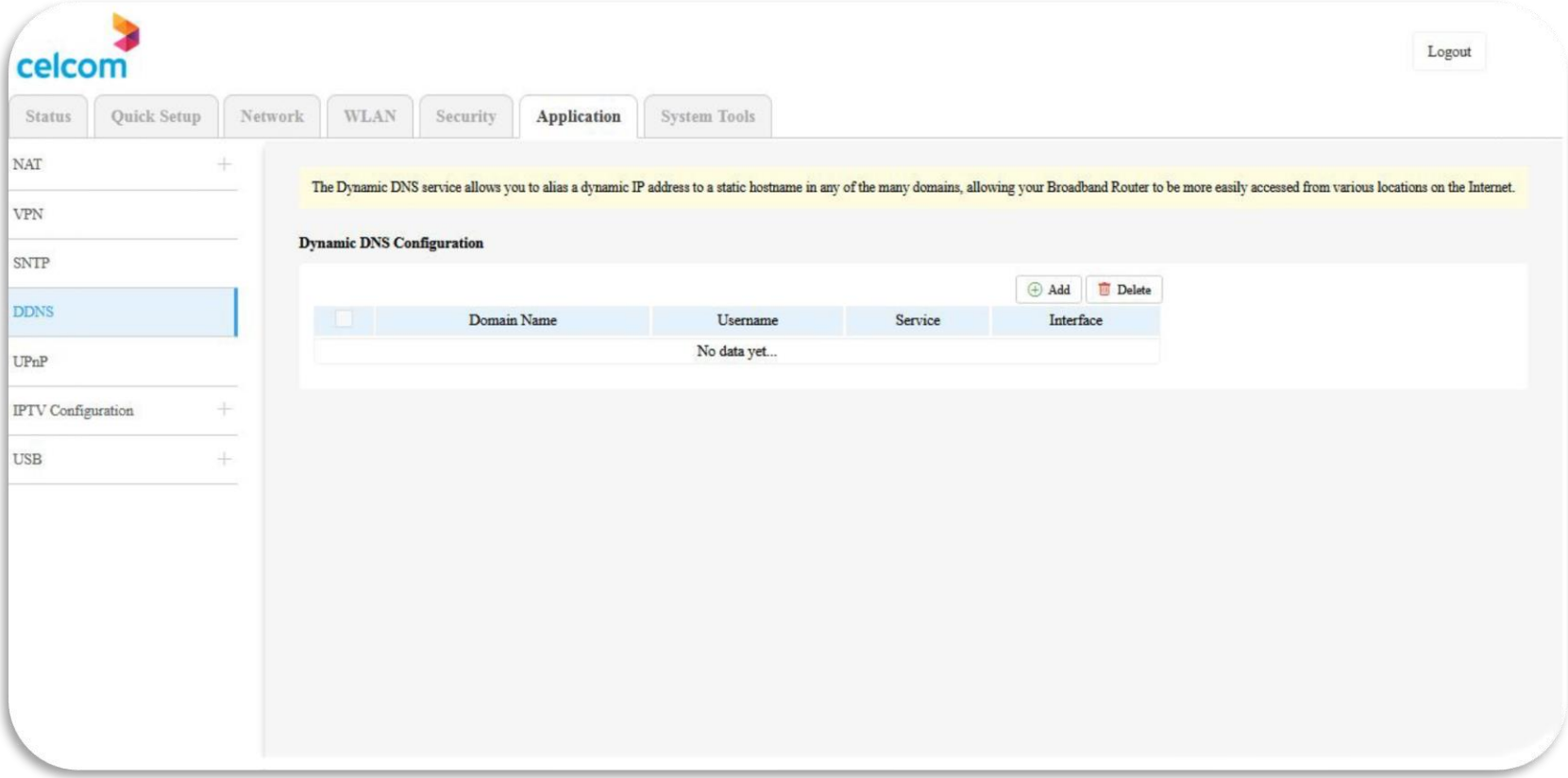
Application and Features – Dynamic DNS Setup

1) Click on Application on the top menu and click on DDNS on the left sub menu
2) The DDNS webpage will be display



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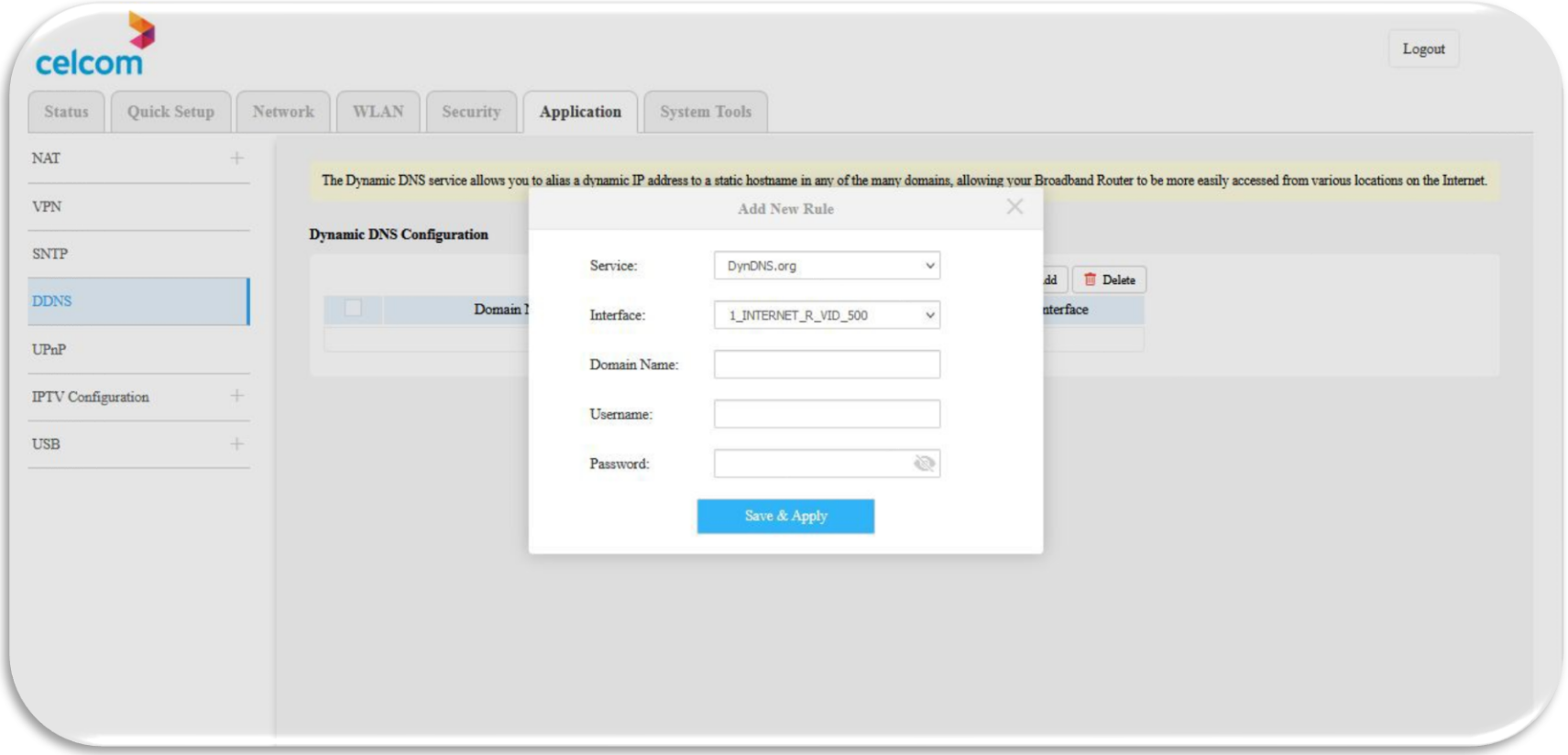
Application and Features – Dynamic DNS Setup

3) Ensure the Interface is selected on Internet
4) Key-in the Domain Name, Username and Password for the DDNS account
5) Click on Save & Apply



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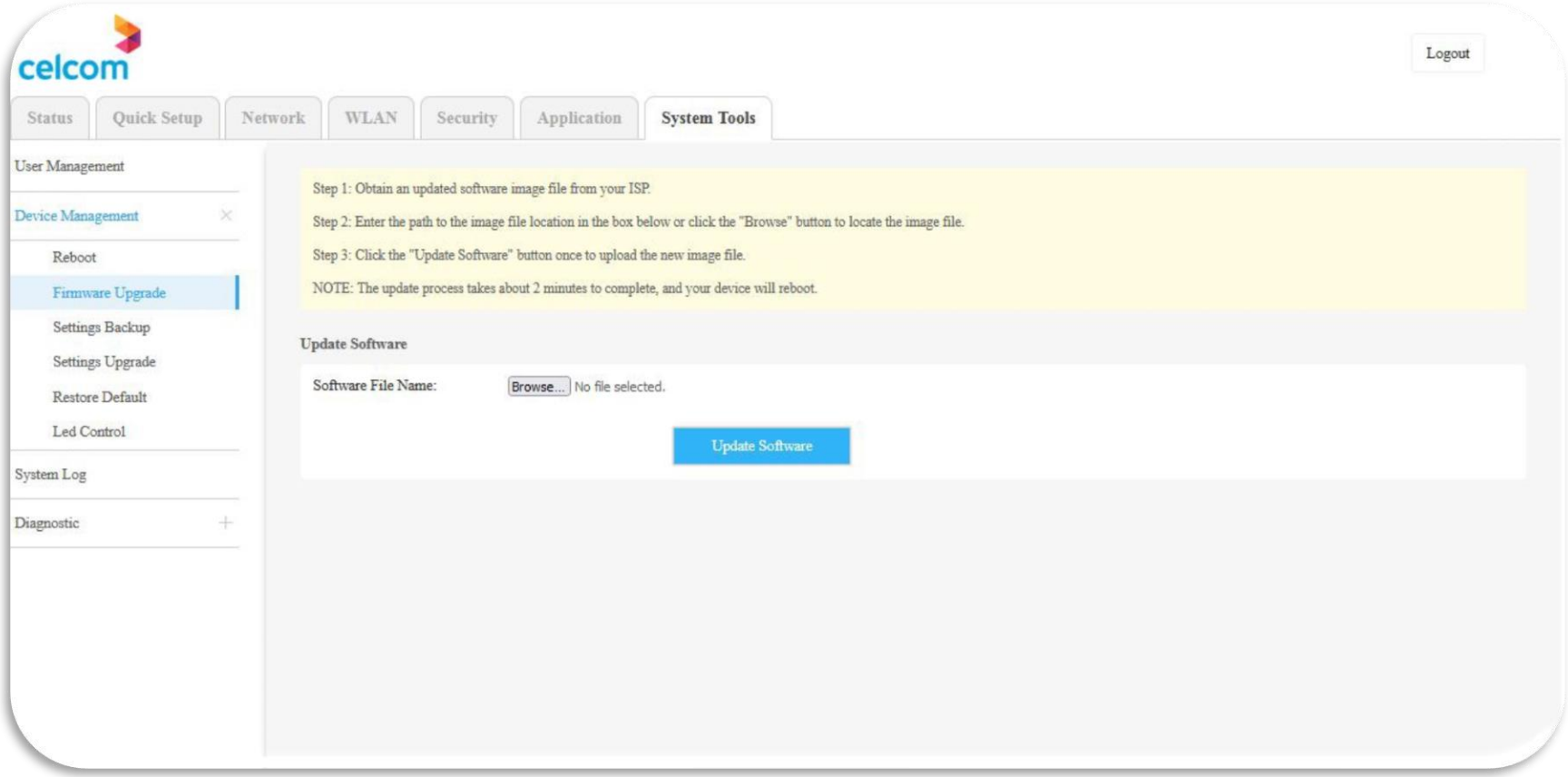
Firmware Upgrade & Restore Default

Firmware Upgrade & Restore Default

1) Click on System Tools on the top menu and Device Management on the left sub menu
2) Click on Firmware Upgrade and then click on the Browse button.
3) Locate the firmware file in the PC and click on Update Firmware



Note : Please do not switch off the router while firmware upgrade is in progress

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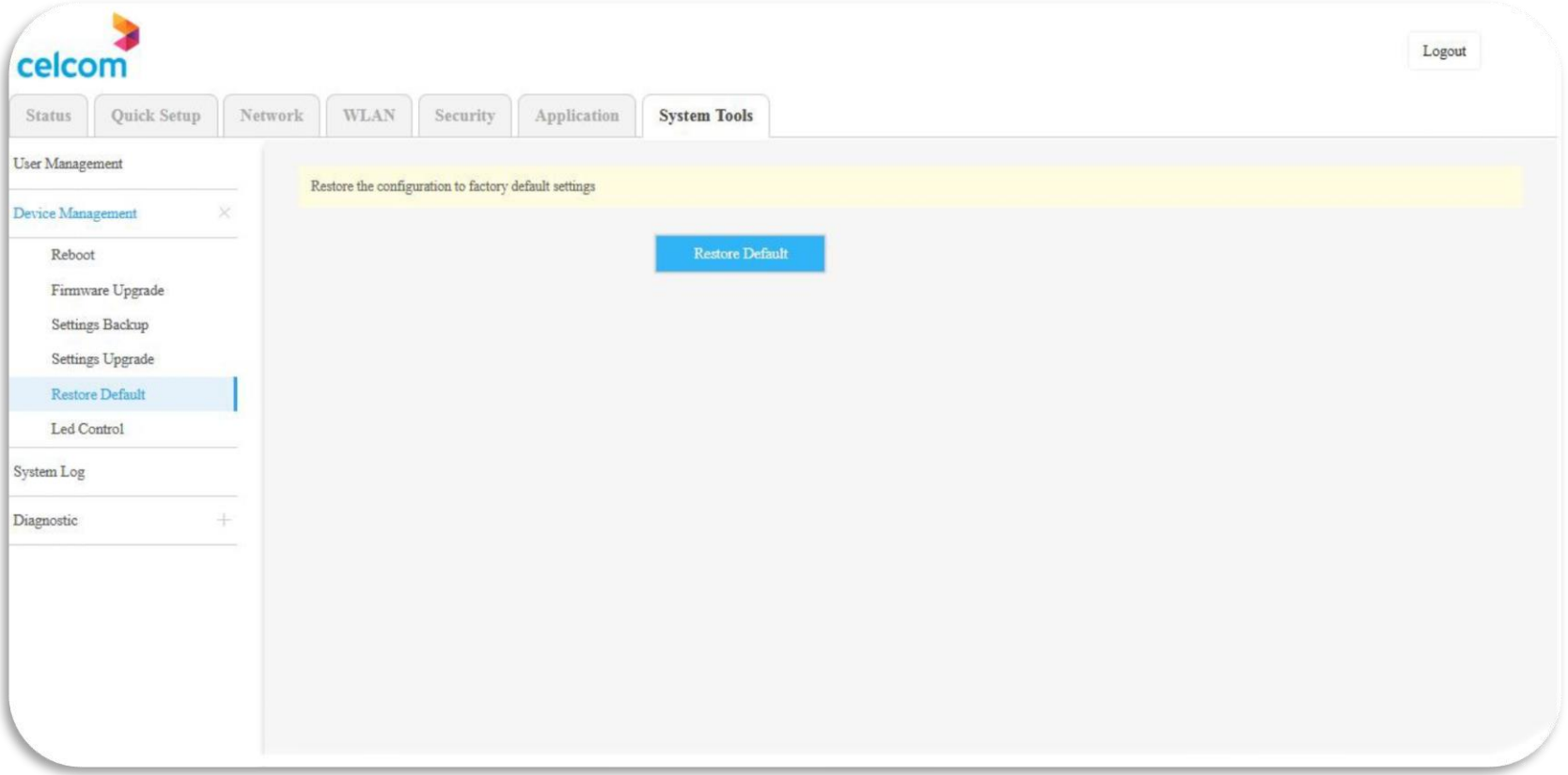
Firmware Upgrade & Restore Default

4) It is advisable to Restore Default of the router after Firmware Upgrade
5) Click on Restore Default below the Device Management on the left sub menu
6) Then click on the Restore Default to start the factory default reset



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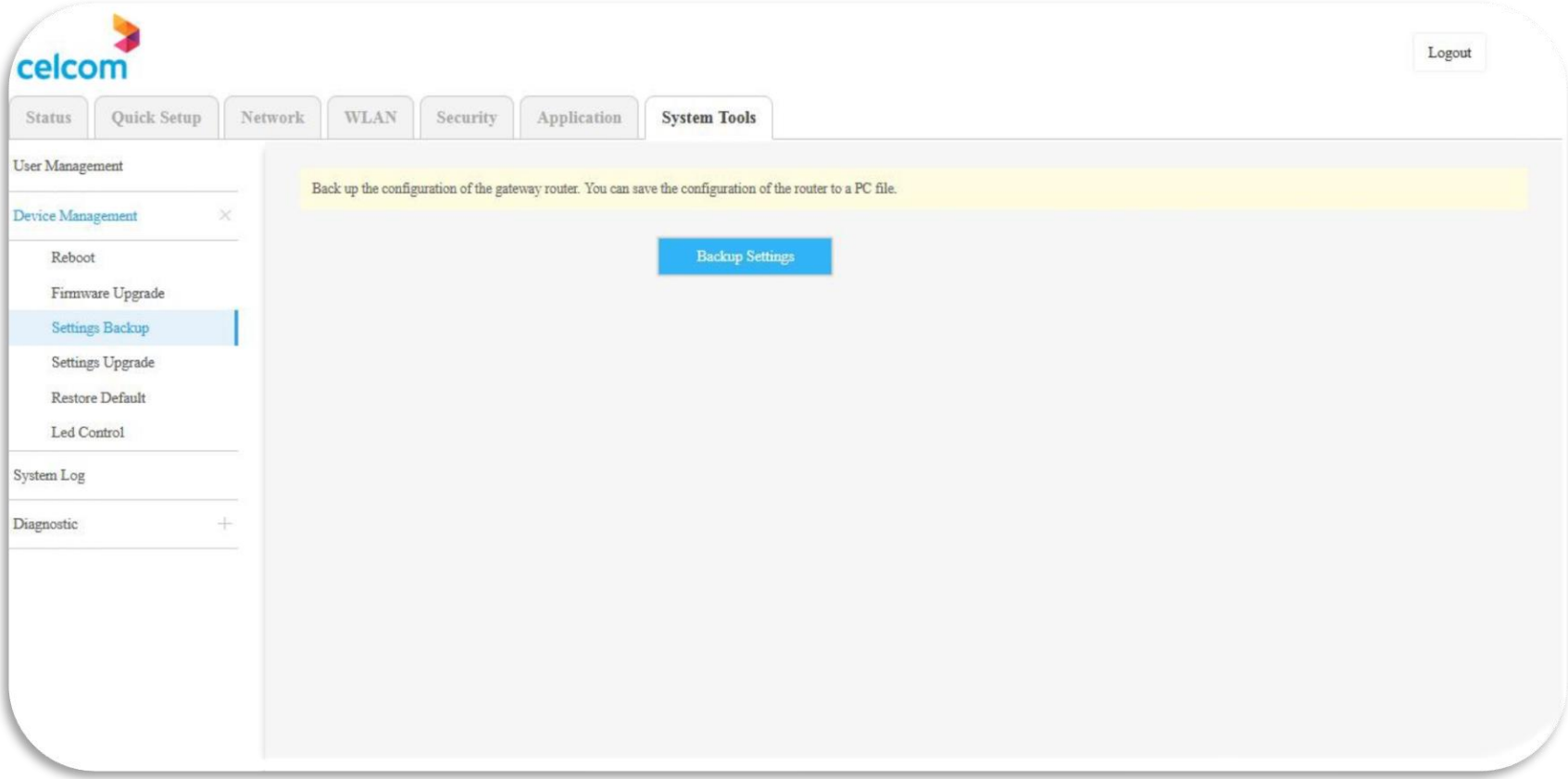
Backup & Restore Settings

Backup & Restore Settings

1) You can backup your current configuration by click on Settings Backup on the left sub menu under Device Management
2) When you click on the Backup Settings button, you need to direct the location for the setting file to store



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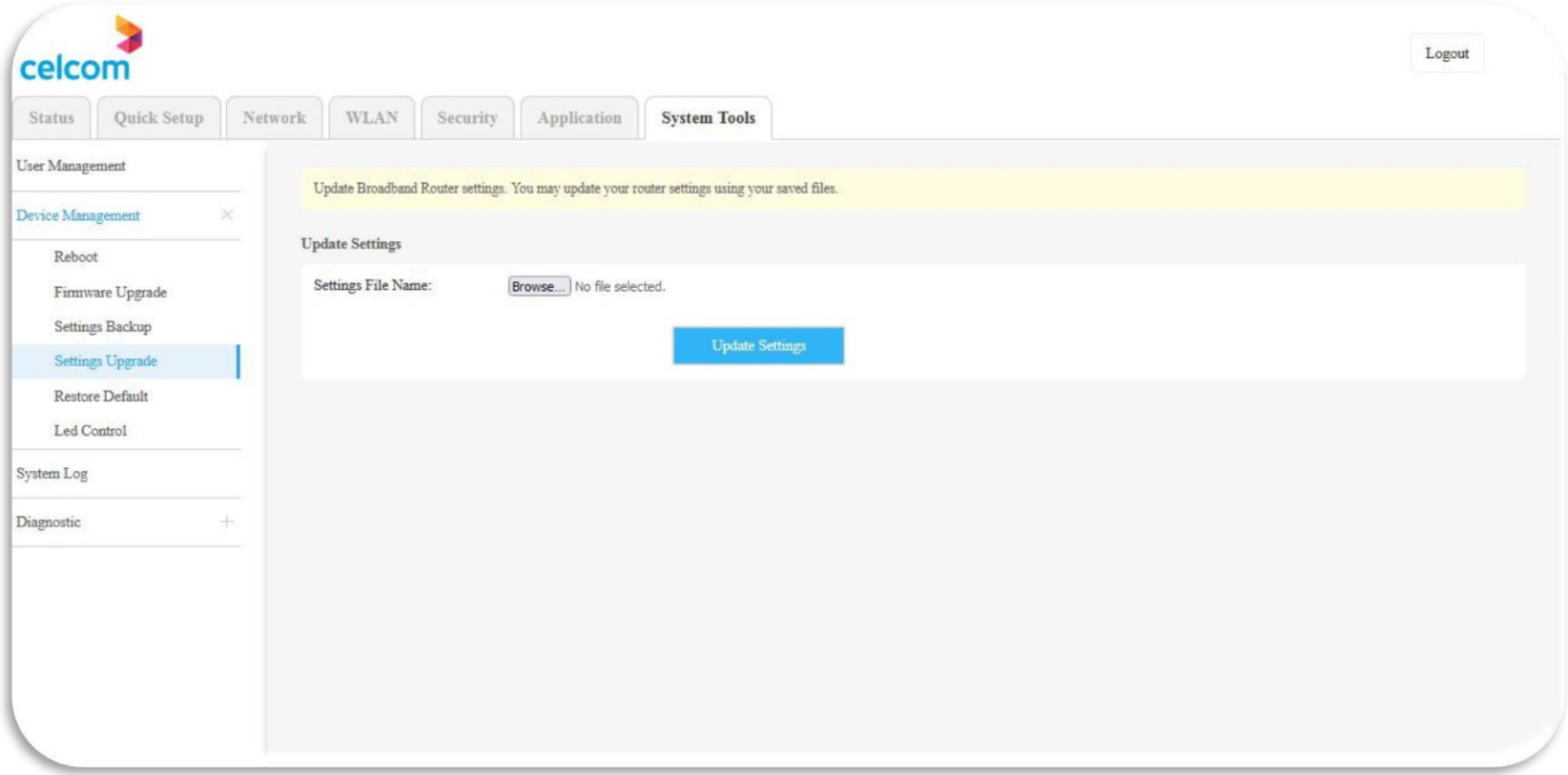
Backup & Restore Settings

3) For restoring the settings from the previous configuration, click on Settings Upgrade on the left sub menu
4) Click on the Browse button and locate the configuration file that is store in the PC
5) Click on Update Settings for the settings restoration to process



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BASIC TROUBLESHOOTING - GUIDELINES

Basic Troubleshooting - Guidelines

I. What should do if cannot access the internet?

- Make sure the Ethernet cables are correctly and securely connected to the modem router.
- Try to log in to the web management page of the modem router using the default address at xxxxxxxx . If failed, please change the computer settings to obtained an IP address automatically from the RGW.
- Consult Celcom (SPOC) and make sure that the VLAN ID, connection type, account Username and
- the Password are correct as per available in the Work Order. If not, please replace with the correct parameter value and try again.
- Please ensure the RGW using the latest Firmware version.
- Restore the modem router to its factory default settings and reconfigure it by following the instructions in the user guide.

Basic Troubleshooting - Guidelines

II. What can I do if I cannot find my wireless network, or I cannot connect the wireless network?

If you failed to find any wireless network, follow the **four (4)** steps below:

1. Make sure the wireless function is enabled if you're using a laptop/smartphone with built in wireless adapter. You can refer to the relevant document or contact the laptop/smartphone manufacturer.
2. Make sure the wireless adapter driver is installed successfully and the wireless adapter is enabled.
3. You can refer to the relevant document or contact the wireless adapter manufacturer.
4. Restart the devices and RGW.

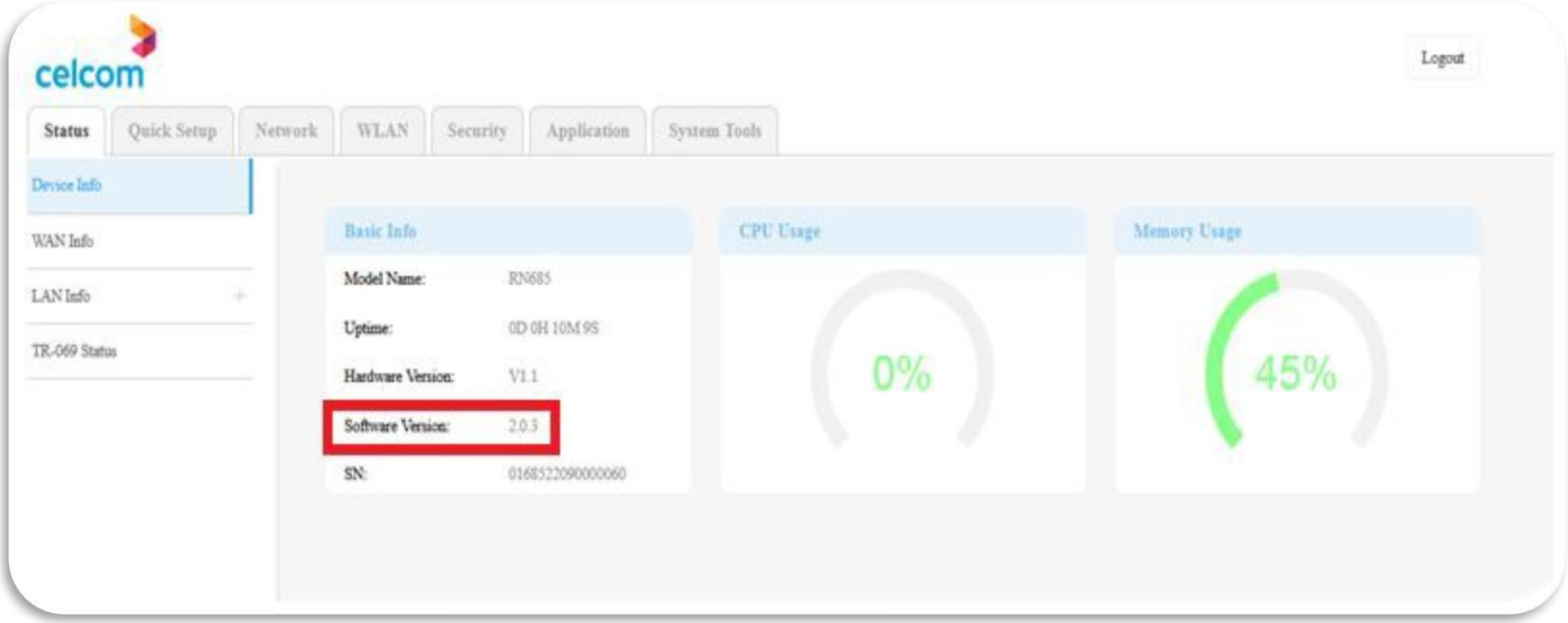
If you can find other wireless network except your own, follow the **four (4)** steps below:

1. Check the Wi Fi LED indicator on your RGW.
2. Make sure the computer/device is still in the range of your RGW, move closer if it is currently too far away.
3. Go to Wireless>Wireless Settings , and check the wireless settings, double check at the Wireless Name to ensure it's enabled and not hidden.
4. Restart the RGW.

Basic Troubleshooting - Guidelines

III. If you failed to connect to the Wireless Network, please follow the three (3) steps below:

1. On device, please try to 'Forget Network' or delete the WiFi history or Reset Network Setting then try to pair with the WiFi by key in the correct password.
2. Try to reboot all the devices.
3. Check the RGW Firmware version and to ensure the device are using the latest Firmware version.



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Basic Troubleshooting - Guidelines

IV. I can't get the internet speed as per subscribed?

There are many factors that caused you can't get maximum internet speed like a such as poor WiFi coverage, WiFi deadzones , WiFi interference, device software/hardware issues and many more.
To measure the actual internet speed, please disconnect all the devices from the WiFi /LAN network then please perform the speed test by using direct cable to the computer.

The **four (4)** steps can advice customer to reduce the slow connectivity issues:

1. Frequently reboot the RGW (enable auto reboot in the RGW setting). The RGW will scan and auto assign to the best channel after rebooted, thus can minimize the WiFi interference issue.
2. Connected to WiFi 5GHz band.
3. Use Mesh WiFi /extender/booster to enhanced the WiFi signal.
4. Check the device specs to know about device capability.

Basic Troubleshooting - Guidelines

LED	COLOR	STATUS	DESCRIPTION	Action Taken
PWR	Yellow	ON	System boot up completely	NA
		OFF	Power Off	To ensure the power is ON
INT	Yellow	ON	Device got IP and internet service connection successful	NA
		OFF	The device cannot obtain an IP address	Check the username and password for the internet
WPS	Yellow	ON	Router is connected in mesh network and backhaul signal is very good	NA
		OFF	Mesh disabled	Try to move the MESH AP closer and press on the WPS button for the MESH pairing to start *If there is just one router in one premise , this LED will not light up
		FLASH	Mesh network or WPS connection is being established	NA
LAN1 – LAN4	Yellow	ON	Ethernet port is Up but no data transfer	NA
		OFF	Ethernet port is down	Check the ethernet cable is plug in properly between the correct LAN port and PC
		FLASH	The port is Up and there is data transmission	NA
WAN	Yellow	ON	The WAN port is Up but no data transmitting	NA
		OFF	The WAN port is Down	Check the ethernet cable is plug in properly between the correct WAN port and BTU
		FLASH	The WAN port is up and transmitting data	NA
2.4/5G	Yellow	ON	Wi-Fi is Up but no data transfer	NA
		OFF	The WiFi is turned off	Ensure 2.4Ghz and 5Ghz wireless is enable in Web GUI of the router in the WLAN menu
		FLASH	Wi-Fi is Up and there is data transmission	NA
USB	Yellow	ON	USB device connected	NA
		OFF	No USB device connected	Check the USB cable is plugin to the USB device

Thank you

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