# ANTANAEDIA HOTSPOT SOFTWARE CONTROL WIFI AND ENGAGE YOUR CUSTOMERS

NI-FI HOTSPOT





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## 1 Introduction

## 1.1 What is Antamedia HotSpot?

**Antamedia HotSpot** is gateway software which helps you in controlling and billing your customers for the Internet usage. Antamedia HotSpot does not require any Client software installations. It uses captive portal technology to show login page in customer browser. Upon connecting to your network (using wireless cards or UTP cable), customer will be prompted to enter valid username and password to get Internet access. After successful login, your customer will see the remaining time and bandwidth quota, expiration date and other relevant info. HotSpot keeps track of customer account and shows warning message when the account is due to expire, helping a customer to refill the account and continue using your service without interruption.

Software includes billing, statistics and reporting with many useful features. It is hardware independent and you can use any type of access points, routers, switches and other equipment to control your WiFi, WiMax, LAN, Cable, DSL, Satellite and other type of network connections.

## **1.2** How Can It Help You?

#### **Become Internet Service Provider**

Antamedia HotSpot has advanced architecture which allows both simple and very large networks. You can start offering WiFi services and grow slowly by adding new access points, connect different city areas, one step a time. However, HotSpot can be used to control wide area networks, cities, making you a Internet Service Provider. You can easily integrate several separate HotSpot networks in one large network, where all accounts are served from central database (included free of charge). Your customers will be able to connect to any HotSpot with their account.

#### Create Paid or Free WiFi HotSpot

Antamedia WiFi HotSpot software helps you to create free or paid WiFi HotSpot. Advantage of our solution is very high customization of user accounts which allows creating limited or unlimited accounts. Among classic features like time and bandwidth quota limits, you can configure daily time limit, number of daily logins, number of simultaneous logins with aggregation, usage schedule (happy hour, nighttime, daytime, weekends ...), which is very practical when offering free WiFi Internet. In addition, it's very easy to offer paid Internet access with higher speeds, quota or unlimited daily or monthly access.

#### Offer WiFi Services in Your Hotel, Coffee Shop, Restaurant

Offering high-speed wireless Internet services in one hotel will only help you increase occupancy and improve tenant and guest satisfaction. Furthermore, it will also represent additional source of revenue for your business. With the use of Antamedia WiFi HotSpot software in your WiFi Hotel, you will be able to:

- control and monitor access to the Internet for all computers, both wired and wireless in your guest rooms

- provide reliable wireless Internet access in your restaurant, lobby and conference rooms, which makes it ideal for seminars and meetings

- maintain secure access to the Internet resources outside the hotel, like on golf courses or by the hotel pools.

#### Serve Walk-in Laptop Customers in Your Cyber Cafe

If you run an Internet Café or Gaming Center, a great profit booster can be a wireless network. Many people use their own laptop for everyday job or on vacation to stay in touch with their family and friends. Even in non-working hours of your primary business, your customers will be able to use your services and generate profit. Best of all, it is automated, there are no maintenance fee for computers, licenses for software and OS. Your cafe, showing your WiFi logo, will be more professional and will differentiate you in high cybercafe competition.



#### **Can be used in Various Locations**

Flexible architecture makes it suitable for different locations like Airports, Cruise Ships, Train Stations, Motels... Customers can sign-in online and pay using credit card or tickets can be printed in advance and sold by front desk staff, receptionist, bartender, cybercafe operator, or by a vending machine. In case of credit card payment, the amount is collected from customer by your Credit Card processing company and stored to your merchant account. A payment gateway company transfers collected money to your bank account usually at the end of the month. Antamedia does not collect any fees. Full revenue goes to you.



## 2 **Requirements**

In order to control wireless users, Hotspot software has to be set up on a gateway computer in your network. For minimal Hotspot configuration you need 3 devices:

- Hotspot gateway PC
- Internet modem/router
- Wi-fi device for providing access to users (wi-fi router or access point)

#### System requirements for Hotspot gateway PC:

We strongly encourage you to install HotSpot on SSD drive because it can significantly improve software performance. **CPU**: 2 gigahertz (GHz) or faster 64-bit (x64) processor

**RAM**: 4 gigabyte (GB)

**NIC:** 2 network interface cards, for maximum performance we recommend using Intel PRO/1000 (EXPI9400PTBLK) network adapters

OS: Windows Server 2003, Server 2008, Server 2012, XP, Vista, Windows 7, Windows 8.1, Windows 10

Most modern computers have one network card built in, the other one you will need to purchase and install to computer's PCI slot.



Please connect one network card to the Internet router and other one to wi-fi device that your customers will use to access Hotspot. If you plan to use a wi-fi router to provide access for customers, please connect it to Hotspot server PC using LAN (not WAN) port.





Note that 2 network cards on the Hotspot server cannot be bridged, the Hotspot (Internal) network has to operate in different IP range than External network. Please refer to the diagrams for the example IP settings.



## 2.1 **Pre-installation Steps**

Before installing Antamedia HotSpot software, please ensure that following conditions are met:

✓ Windows account on which software will be installed and used must has **administrative** privileges.

#### ✓ Windows **User Account Control** is set to Never Notify level.

- Go to Windows Control Panel User Accounts screen
- Click on Change User Account Control settings link
- Move the slider to Never Notify level and click OK
- Restart the computer to apply changes

#### ✓ Windows **Smart Screen** is turned off.

- Go to Windows Control Panel Security and Maintenance screen.
- Click on Change Windows Smart Screen settings
- In new window select "Don't do anything (turn off Windows Smart Screen)" and press on OK
- Restart the computer to apply changes

#### ✓ Windows **Defender exclusions** are set.

- Go to Windows Control Panel Windows Defender and click on Settings.
- Exclusion section press on "Add an exclusion" to exclude C:\Antamedia folder.
- Restart the computer to apply changes

#### ✓ Static IP address is configured on NIC1, the network card connected to the Internet router/modem.

- It is recommended to set same IP address that is already assigned dynamically by router.
- To see which IP NIC1 has currently assigned, go to Windows Control Panel Network and Sharing Center screen
- Click on Change adapter settings link and double click on the NIC1 (Internet) network adapter

Vetwork Connections	_		×
$\leftrightarrow$ $\rightarrow$ $\checkmark$ $\bigstar$ Network and Internet $\Rightarrow$ Network Connections $\Rightarrow$ $\checkmark$ $\eth$ Search Network	rk Coi	nnections	, ,o
Organize   Disable this network device Diagnose this connection	₩ F ₩ F	•	?
NIC1 (Internet) Network 3 Intel(R) 82574L Gigabit Network C NIC2 (Local) Unidentified network Intel(R) 82574L Gigabit Network C			
2 items 1 item selected			: 🖿



• From General tab press on Details button.

Internet	Status		×
General			
Connection			
IPv4 Connectiv	ity:	Internet	
IPv6 Connectiv	ity:	No network access	
Media State:		Enabled	
Duration:		00:25:47	
Speed:		1.0 Gbps	
Details			
Activity —			-
	Sent —	Received	
Bytes:	8,566,248	376,279,829	
Properties	💎 Disable	Diagnose	
		Close	

• Here you will see all current network connection details that you need to set as static

Network Connection Deta	ils X
Network Connection Details:	
Property	Value
Connection-specific DN	
Description	Intel(R) 82574L Gigabit Network Connect
Physical Address	00-0C-29-E3-DD-38
DHCP Enabled	No
IPv4 Address	192.168.118.130
IPv4 Subnet Mask	255.255.255.0
IPv4 Default Gateway	192.168.118.2
IPv4 DNS Servers	8.8.8.8
	8.8.4.4
IPv4 WINS Server	
NetBIOS over Tcpip En	Yes
Link-local IPv6 Address	fe80::82c.f1ac:4426:8013%3
IPv6 Default Gateway	
IPv6 DNS Server	
<	>
	Close
	0.030



- After that go to Windows Control Panel Network and Sharing Center screen.
- Click on Change adapter settings link.
- Right-click on NIC1 (Internet) and select Properties from menu.



• Select Internet Protocol Version 4 (TCP/IPv4) and click Properties button.

III NIC1 (Internet) Properties	×
Networking Sharing	
Connect using:	
Intel(R) 82574L Gigabit Network Connection	
Configure This connection uses the following items:	]
Install Uninstall Properties	
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	
OK Cancel	



• Click Use the following IP address radio button and enter details that you get from ipconfig previously

Internet Protocol Version 4 (TCP/IPv4)	Properties	×
General		
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.	natically if your network supports ask your network administrator	
Obtain an IP address automatical	У	
• Use the following IP address:		
IP address:	192 . 168 . 118 . 130	
Subnet mask:	255.255.255.0	
Default gateway:	192.168.118.2	
Obtain DNS server address autom	natically	
• Use the following DNS server add	resses:	
Preferred DNS server:	8.8.8.8	
Alternate DNS server:	8.8.4.4	
Ualidate settings upon exit	Advanced	
	OK Cancel	

- Enter IP address (e.g. 192.168.118.130)
- Click in Subnet Mask field, value will be set automatically based on IP address, be sure that is same as in Network Connection Details
- IP address of the default gateway (IP of the Internet router).
- Enter DNS addresses, it is recommended to use DNS addresses of your ISP or public DNS service such as Google (8.8.8.8, 8.8.4.4).
- Click OK and close all dialog windows
- ✓ **Static IP address** is configured on **NIC2**, the network card connected to your internal network.

Please note that for this card you need to configure IP address (e.g. 192.168.9.1) and subnet mask (e.g. 255.255.255.0) but not Gateway IP

- ✓ There are no applications running on gateway PC that are using port 78, 80, 81, 82, 443, 463, 614, 12010, 1700, 1812, 1813 (IIS, proxy software).
- ✓ Set computer to act as gateway on network using Windows Internet Connection Sharing / Routing and Remote Access with DHCP Server role or with HotSpot NAT.



Requirements

✓ Note: that Internet modem/router cannot be used as DHCP server for your local network clients. DHCP server must be configured only for the local network. Windows 7, Windows 8.1 and Windows 10 DHCP Server can not provide more than 253 IP addresses for local network. If you want to use more than 253 addresses you can set it from Windows Server 2003, Windows Server 2008 or Windows Server 2012 DHCP Server role. Also, you will need to set subnet mask which will give you this ability. Be sure that you prepare all network devices on local network to use same subnet mask. Bellow are some of examples

IP range (network - broadcast)	Subnet Mask	IP Quantity
192.168.137.0 - 192.168.137.255	255.255.255.0	256
192.168.136.0 - 192.168.137.255	255.255.254.0	512
192.168.136.0 - 192.168.139.255	255.255.252.0	1024
192.168.136.0 - 192.168.143.255	255.255.248.0	2048
192.168.128.0 - 192.168.143.255	255.255.240.0	4096
192.168.128.0 - 192.168.159.255	255.255.224.0	8192
192.168.128.0 - 192.168.191.255	255.255.192.0	16384
192.168.128.0 - 192.168.255.255	255.255.128.0	32768
192.168.0.0 - 192.168.255.255	255.255.0.0	65536



## 2.2 Network Topology Examples

Here you can see couple network topology examples that can give you better insight into how you should set switches, access points and routers on local network in order to control it from HotSpot gateway PC.

## NETWORK TOPOLOGY EXAMPLE





### NETWORK TOPOLOGY EXAMPLE









## 3 HotSpot Cloud

Antamedia HotSpot software is portal gateway application and it is used for control and limiting access to Internet over gateway computer from local network.

To set up properly Antamedia HotSpot on Windows OS, please follow these steps:

- 1. Complete pre-installation steps 5
- 2. Set computer as gateway on network as explained at <a href="http://www.antamedia.com/download/hotspot-setup-guide.pdf">http://www.antamedia.com/download/hotspot-setup-guide.pdf</a>
- 3. Install Antamedia HotSpot software using Express installation and reboot gateway computer.
- 4. After Windows restart HotSpot will start automatically. Login as Administrator and close Setup Wizard guide.
- 5. Go to Setup Network Network Setup tab and select properly network adapters.
- 6. After that you will be able to set and configure additional options in HotSpot software as HotSpot Cloud.

Following the global IT industry trends, from version 4 of Antamedia HotSpot is implemented new, HotSpot Cloud feature.

Cloud HotSpot allows you to control multiple remote locations over the Internet using centralized HotSpot server, and this option also includes Radius server feature which provides easy and secure user authentication and billing. This is accomplished by connecting remote MikroTik or OpenWRT routers to HotSpot.



Routers can be installed in different places like restaurants, coffee shops, retail stores, shopping malls. Routers are using their own Internet connection to provide Internet access to users, and to communicate with HotSpot server in order to authenticate users and control their usage. Users are limited by download, upload, time, quota and other login parameters. Each router can have its own branded pages and theme. This can be configured from HotSpot - Setup - Locations page by specifying router's LAN range of IP addresses.



Requirements:

- MikroTik routers starting from RouterBOARD 750 / RouterBOARD 951 series with OS level 4 and/or OpenWRT router, as in example where is used Linksys WRT54G model
- If remote MikroTik/OpenWRT router also acts as Internet modem/router, it must have static public IP address configured on its WAN port.
- If you have separate Internet modem/router on remote site, forward UDP ports 1700 and 8728 to MikroTik/OpenWRT router.



## 3.1 MikroTik Router Configuration

The following example illustrates how to connect remote **MikroTik** router:

It is recommended to reset the router to factory settings before connecting it to Hotspot server.

- 1. Make sure that MikroTik router is already set up and operating as gateway for its local network.
- 2. Open MikroTik router settings in web browser from a Windows computer located in local network, the pc should be set to automatically obtain IP address.
- 3. Click on the **IP** section and select **Services**, click on letter **E** that is displayed next to **api** entry.

Interfaces					
Bridge		IP -> Servi	ces		
Switch					
PPP					
Mesh	7 items				
IP 🔻	press on "E"	<b>▲</b> Name	Port	Available From	Certificate
ARP	E 🦛	api	8728		
Accounting	Enable	ftp	21		
Addresses	D	ssh	22		
DHCP Client	D	telnet	23		
DHCP Relay	D	winbox	8291		
DHCP Server	D	www	80		
DNS	E X	www-ssl	443		none
Firewall					
Hotspot					
IPsec					
Neighbors					
Packing					
Pool					
Routes					
SMB					
SNMP					
Services					



- 4. Download and extract RouterAdmin to the desktop of this PC
- 5. Run as administrator RouterAdmin.exe from the folder and click on MikroTik button
- 6. Enter Router LAN IP address and Password for admin user, click on Get Router Data button

			-		
192, 168, 88, 1	Port 8728	User	Passwor	ď	Get Router D
Router Setup	LAN	WAN	Walled Garden	Log	
HotSpot Ser	ver IP	Adm	in Password		
		anda	incula	Cet Addres	5595
				GELAUULE	3303
Interface (LA)	or WLAN)		Save		
Interface (LA) ether2-maste	r loc Routerad	min	Save		×
Interface (LAF ether2-maste	r-loc Routerad	min	Save		×
Interface (LAF ether2-maste Authentication	Nor WLAN) r-loo Routerad	lmin d	Save		×
Interface (LAT ether2-maste Authentication Accounting Po	N or WLAN) r-loc Routerad n Por Finished	min	Save		×
Interface (LAF ether2-maste Authentication Accounting Po Communication	N or WLAN) r-loc Routerad n Pot Finished ort	min	Save	ОК	
Interface (LAT ether2-maste Authentication Accounting Po Communication	n Por Finished	min d	Save	OK Get DHCP	X Pool
Authentication Accounting Po Communication	I or WLAN) r-loc Routerad Finished Finished n Pour nistration throug	min d	Save	CK Get DHCPI	Pool



- 7. First on the Router Setup tab enter remote HotSpot Server IP address
- 8. (Optional) Set new **Admin Password** for MikroTik and click **Save** button.

Router LAN IP		Port	User		Pass	word			
192.168.88.1		8728	admin		anta	amedia		Get Rout	ter Dat
Router Setup	LAN		WAN	Wall	ed Garde	en	Log		
HotSpot Ser	ver IP	,	,	Admin Pas	sword				
192.168.1.5				antamedia					
Interface (LAI	V or WL	AN)	ſ	Sa	ve		Get Addres	ses	
ether 2-maste	er-local	•				_			
Authenticatio	n Port	1812	Radius	Secret	secre	et	Get Routes		
Accounting Pe	ort	1813	Comm.	Interval	5	sec	 Get DNS		
Communicatio	n Port	1700	Timeou	t (ms)	3000	)	 Get DHCP F	Pool	
☑ Allow adm	inistrati	on throug	h Internet (WA	N port)			 Get DHCP S	Gerver	

- 9. Select the **Interface** that is connected to local network which will be controlled by HotSpot software
- 10. Make sure that Allow administration through Internet (WAN port) is checked
- 11. It is recommended to leave other options under  $\ensuremath{\textbf{Router Setup}}$  tab on default values
- 12. (Optional) Change **Router LAN IP** address from **LAN** tab.



13. Create a **DHCP pool** that matches IP range of **Router LAN IP** address, delete all others

14. Go to **WAN** tab and in **Router WAN Interface** field select interface that is connected to the Internet

15. Set Router WAN IP address and appropriate NetMask

16. Set the default Gateway address and DNS server (Internet router IP, ISP DNS or public like 8.8.8.8)

Router LAN I	P Port	User	Password	
192.168.88.1	8728	admin	antamedia	Get Route
Router Setup	LAN	WAN	Walled Garden	Log
Router L	AN Interface	Router LAN IP	(255.255.25	
ether2-ma	ster-local 👻	192.168.2.1	/24 🔻	
DHCP Poo	s			Get Addresses
Enbl.	Name D	HCP from DH	CP to	
	default-dhcp :	92.168.2.3 19	2.168.2.254	Get Routes
		Add	Del	 Get DNS
DHCP Serv	ers			Get DHCP Pool
DHCP Serv Enbl. I	ers D Name	Interface	Lease	Get DHCP Pool



- 17. Important! Make sure that Static box is ticked
- 18. (Optional) Configure a list of websites accessible without user authentication under Walled Garden tab.
- 19. Click **Save** button to apply the settings for both LAN and WAN router interfaces.
- 20. After saving, disable and re-enable network card on the pc and restart **HotSpot Router Admin** application

Route	r LAN IP	Port	User	Passv	vord	
192.16	58.88.1	8728	admin	antar	media	Get Router Da
Router	r Setup		WAN	Walled Garder	n Log	
		0.20				
Ro	uter WAN Inte	erface				
et	ner 1-gateway	•				
Ro	uter WAN IP	(255.2	255.255.0)		Get Addr	esses
19	2.168.1.2	/24	•		÷	
					 Get Rout	20
1	Static					
Gat	teway					
19	2,168,1,1					
					Get Divs.	
DN:	S				 Get DHCE	Pool
19	2.168.1.1					
					 Get DHCF	Server



After these procedures remote MikroTik router will be ready to be added inside HotSpot software. Go to HotSpot -Setup - Cloud HotSpot page and click **Configure Routers** button. Click **Start Radius** and then **Auto Add Routers** button. Check **Enable Cloud Service** box and click **Save**, after that routers will be controlled by HotSpot software.

									-	đΧ
DEVICES	Credit Cards Network <u>Create</u>	Whitelists Database a Cloud Hot	uri Pages Spot using	Email Internet Plans Radius and	Social Free Access Routers	Usage Schedule Cloud HotSpot	Ed Employees WIFI Locations	Advertising Options	Solutions License Language	Support
	Create a doo shopping ma authenticate theme. This <b>Implicate</b> <b>Enable</b> Router IP	ud HotSpot solution b lls. Routers are using and control usage. L can be configured in Cloud Service	y connecting rout their own Interne Jsers are limited b the Locations page HotSpot Pu	ers to HotSpot. Rou et connection to provy y download, upload, e by specifying route blic IP 192.168. Router IP	ters can be installe irde Internet acces time, quota and o er's LAN range of IF 1.5 Router ID	d in different places is to users, and to co ther login parameters P addresses. External Public IF port forwarded t	like restaurants, rei mmunicate with Ho s. Each router can l p provided by ISP v to a HotSpot NIC 1 blame lot to s and Route	tail stores, coffi tSpot server in have it's own br which is (WAN side)	ee shops, other to randed pages and	1
OPERATOR	Router ID Location Nan	ne T Radius				To configure f Router Please configu Authentication	Routers, please dic Admin ure Radius ports n Port 1812 \$	k Auto A	dd Routers t Radius	
SETUP	Ad Rem Sar	id ove ve Routers				Accounting Po Communicatio Radius Secret Currently sup OpenWRT rou OpenWRT sup	ort 1813 0 on Port 1700 0 t secret uported: Mikrotik ro uters running Antan	Stop	ius, (non-Radius)	
LOGOUT	Ac	counts 5	C	online	Do	wnload		Upload	-	]



## 3.2 **OpenWRT Router Configuration**

This example will show how to connect remote **OpenWRT** router, example uses **Linksys WRT54G** model:

- If router runs factory firmware, you need to install Antamedia OpenWRT:
  - Download the openwrt-wrt54g-squashfs.bin firmware image to a PC connected to router's LAN port: <u>www.antamedia.com/download/openwrt-wrt54g-squashfs.bin</u>
  - Open <u>http://192.168.1.1/</u> (other IP if you changed router LAN IP address) in the browser and go to Administration-Firmware Upgrade page
  - Upload openwrt-wrt54g-squashfs.bin file. Wait 2 minutes. The router will reboot itself automatically after the upgrade is complete.
- If router already has other version of **OpenWRT** firmware, update it with this version: <u>www.antamedia.com/download/openwrt-brcm-2.4-squashfs.trx</u> Follow the same above steps for installation.
- If router runs DD-WRT firmware, update it with <u>www.antamedia.com/download/openwrt-wrt54g-squashfs.bin</u>
- 1. Make sure that the router is already set up and operating as gateway for its local network.
- 2. Open router settings in web browser from a Windows PC connected to router's LAN port, the PC should be set to automatically obtain IP address.
- 3. Login to the router using **root** username and blank password.

÷	•	⋒	🛞 192.168.1.1/cgi-bin/luci	
Ope	enWrt	Open	Wrt Attitude Adjustment 12.09.1   Load: 0.03 0.06 0.03	
	No pa There Go to	is no passi	rd set! password set on this router. Please configure a root passwo word configuration	rd to protect the web interface and enable SSH.
	Auth	oriza	ation Required	
	Please	ente	r your username and password.	
	Use	ernam	e	🔒 root
	Pas	swor	d	<i>(</i>
		_		



4. Set the Router Password, leave SSH Access setting at default values and click Save & Apply button.

anges the administrator password for accessing the	device
Password	<mark>,⊘</mark> ••••••••
Confirmation	<b>∂</b> ••••••
H Access ppbear offers <u>SSH</u> network shell access and an integ	rated <u>SCP</u> server
Interface	<ul> <li>Ian: </li> <li>wan: </li> <li>unspecified</li> <li>Listen only on the given interface or, if unspecified, on all</li> </ul>
Port	22 Ø Specifies the listening port of this Dropbear instance
Password authentication	Allow SSH password authentication
Allow root logins with password	$\overline{\mathbb{V}}$ (2) Allow the <i>root</i> user to login with password
Gateway ports	$\square$ (iii) Allow remote hosts to connect to local SSH forwarded port
* Add	



- 5. **Download** and **extract** <u>RouterAdmin</u> to the desktop of this PC
- 6. Run as administrator RouterAdmin.exe from and click on **OpenWRT** button
- 7. Enter Router LAN IP address and Password for the root user, click on Get Router Data button.

192.168.1.1 rou	ter_pass	Get Router Data Stop
Router Setup LAN & WAN	Password Walled Gard	den Log
11.15 . 1.5 Th		ар
Hotspot Server IP	OpenWrt	Router Message: /sbin/uci: En
	opennit	Wireless · Ok
Communication Interval		=== Get DHCP ===
5 seconds	Channel	Router Message: result GET_U 100
User inactivity time		result GET_UCI_DHCP_LIMIT
200 seconds	Router ID	result GET_UCI_DHCP_LEASE
	hotspot_1	12h
	Router LAN Interface	DHCP: Ok
	br-lan •	=== Get WAN ===
		Router Message: result SHOW
		network.wan.ifname=eth0
		network.wan.proto=dhcp

- 8. On the Router Setup tab set desired SSID for WiFi network, do not enter HotSpot Server IP yet.
- 9. If this is a first router you are connecting to HotSpot, set **Router ID** to **hotspot\_1**, increase the number for every next **OpenWRT** router you add.
- 10. Make sure that **Router LAN Interface** is set to **br-lan** value.



11. Go to the LAN & WAN tab, optionally change Router LAN IP address.

Router LAN IP	Password				
192.168.2.1	router_pass	Get Router Data Stop			
Router Setup	AN Password Walled G	Garden Log			
Router LAN IP	Router WAN IP	100 result GET_UCI_DHCP_LIMIT			
192.168.2.1	192.168.1.10	150 result GET, UCI, DHCP, LEASET	ME		
	Static IP	12h			
DHCP From	Net Mask	DHCP: Ok			
192.168.2. 100	255.255.255.0	=== Get WAN ===			
То	Gateway	Router Message: result SHOW	Router Message: result SHOW_UCI		
192.168.2. 250	192.168.1.1	network.wan=intertace			
Lease Time	DNS	network.wan.proto=dhcp			
720 Minutes	192.168.1.1	WAN-OF			
		=== Set LAN IP ===			
		Ok			
		=== Set DHCP ===			
		=== Set WAN ===			
		Exception: 1001: Command exe	cutio		

- 12. Set DHCP pool options (**From, To and Lease**).
- 13. Set Router WAN IP address and appropriate NetMask.
- 14. Set the default **Gateway** address and **DNS** server (Internet router IP, ISP DNS or public like 8.8.8.8)
- 15. **Important!** Make sure that **Static** box is ticked.
- 16. Click **Save** button to apply the settings for both LAN and WAN router interfaces.



17. (Optional) Configure a list of websites accessible without user authentication under **Walled Garden** tab.

Router LAN IP	Password			
192.168.2.1	router_pass	Get Rou	ter Data	Stop
Router Setup LAN	N & WAN Password	Walled Garden	Log	
paypal.com www.paypal.com www.paypalobjects.cc www.paypalobjects.cc wypaypalsi.double paypalsi.double paypal.112.207, securepics.ebay mobile.paypal.com code.jquery.com connect.faceboc www.ak.faceboc	n aypal.com om orts.com dick.net net static.com m 1 k.net ak.com		network.wan. network.wan. network.wan. WAN: Ok === Get Wallee Router Messay <u>www.paypal.</u> <u>www.paypal.</u> <u>www.paypal.</u> <u>www.paypal.</u> <u>paypalssl.doul</u> paypalssl.doul paypalssl.doul paypalssl.doul paypalssl.doul paypalssl.doul paypalssl.doul paypalssl.doul paypalssl.doul paypal.112.200 securepics.eb mobile.paypal. m.paypal.com code.jquery.cc connect.faceb www.ak.facel	resolv_dns=192.168. up=1 connect_time=16 device=eth0 d Garden === pe: paypal.com com bjects.com bjectick.net r.net aystatic.com com m ook.net book.com

- 18. After saving, disable network card on the PC.
- 19. Physically turn off the router and wait 3 minutes.
- 20. After 3 minutes, enable network card on the PC.
- 21. Close **RouterAdmin** application.





- 22. Re-plug the network cable from  ${\bf LAN}$  to  ${\bf WAN}$  port of the router.
- 23. Start RouterAdmin application and go to OpenWRT, click on Get Router Data button.
- 24. Go to **Router Setup** tab and now enter remote **HotSpot Server IP** address.
- 25. Select one of the options from **Channel** drop-down menu, if you are unsure which, select the last one.
- 26. Click **Save** button.

·····	Router LAN IP	Password					
-	192.168.2.1	router_pass	ş	Get Router	Data	Stop	
croTik							
	Router Setup LAN & V	VAN Pass	word Wa	alled Garden	.og		
WPT	HotSpot Server IP		SSID	1	network.wan.res network.wan.up=	olv_dns=192.168. 1	*
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After these procedures remote OpenWRT router will be ready to be added inside HotSpot software. Go to HotSpot -Setup - Cloud HotSpot page and click **Configure Routers** button. Click **Start Radius** and then **Auto Add Routers** button. Check **Enable Cloud Service** box and click **Save**, after that routers will be controlled by HotSpot software.

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	Credit Cards	Whitelists	URL	Email	Social	Usage Schedule	Employees	ditions Advertising	Solutions License	Support
	Network	Database	Pages	Internet Plans	Free Access	Cloud HotSpot	WiFi Locations	Options	Language	
DEVICES	Create a dou shopping ma authenticate theme. This of <b>Enable</b> of	a Cloud Hot: ud HotSpot solution b lls. Routers are using and control usage. L can be configured in t Cloud Service	Spot using y connecting routi their own Interne isers are limited bi he Locations page HotSpot Pu	Radius and ers to HotSpot. Rout t connection to prov download, upload, by specifying route blic IP 192.168.	Routers ers can be installe ide Internet acces time, quota and o r's LAN range of IF 1.5	d in different places is to users, and to co ther login parameter P addresses. External Public II port forwarded t	like restaurants, re mmunicate with Ho s. Each router can provided by ISP 1 p. a. HotSpot NIC 1	tail stores, coffe tSpot server in ( have it's own br which is (WAN side)	ee shops, other to anded pages and	
STATISTICS	Router IP Router ID Location Nan	Active	Туре	Router IP	Router ID	Radiu To configure f	s and Route Routers, please clic	er Config k	A etics X	
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