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1 - Welcome to Custom Integration Solutions™

This manual has details for the installation, setup of the hardware, and the managed interface of your CIS-CCR1009 network router

2 - Package Contents



Router (1)



Plug (1)



Rack Ears (2)

3 - Overview

The CIS-CCR1009 is a network router with eight gigabit ethernet ports, one SFP+ port, and one SFP port.

(Ethernet 1-4 are in a router group) We recommend you to set up a password to secure your device.

This unit is compatible with 1.25G SFP and 10G SFP+ modules.

Powering

This unit has capability to be powered by POE with a input Voltage of 14-57 V. The CIS-CCR1009 also can be powered by one of the two AC inputs, with the other one being available for redundancy (if one power line fails, the other one will take over automatically)

Configuration

This device is preconfigured with DHCP and our own CIS configuration, however depending on your desired network, it may need additional configuration (Wireless, Static IP address assignment, etc) This manual will help in understanding how to change these settings and get you started!

Initial connection must be done via the ethernet cable, using a web browser. The router has DHCP enabled by default and will acquire an IP address for your connected device. Connect to any port, and go to 10.100.1.1 in your browser and enter these credentials: username: **cis** and password: **integration**

For recovery purposes, it is possible boot the device from network, see Buttons and Jumpers.

Extension slots and ports

- 8 gigabit ethernet ports
- 1 SFP+ cage, which accept both 1.25 Gb SFP and 10 Gb SFP+ modules. 1 SFP cage.
- RJ45 serial port.

LED indicators

- PWR LED is lit when the router is powered on.

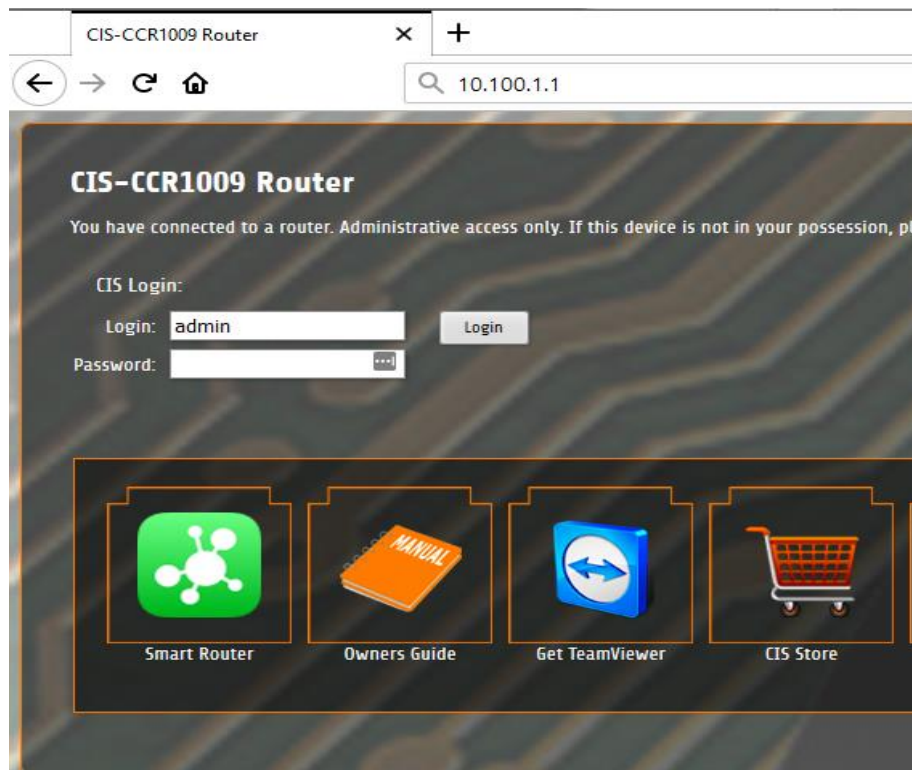
- Port LED will blink when active

Buttons and Jumpers

Reset button: Hold this button during boot time until the USR LED light starts flashing, (5 seconds) then release the button to reset to the default CIS configuration.

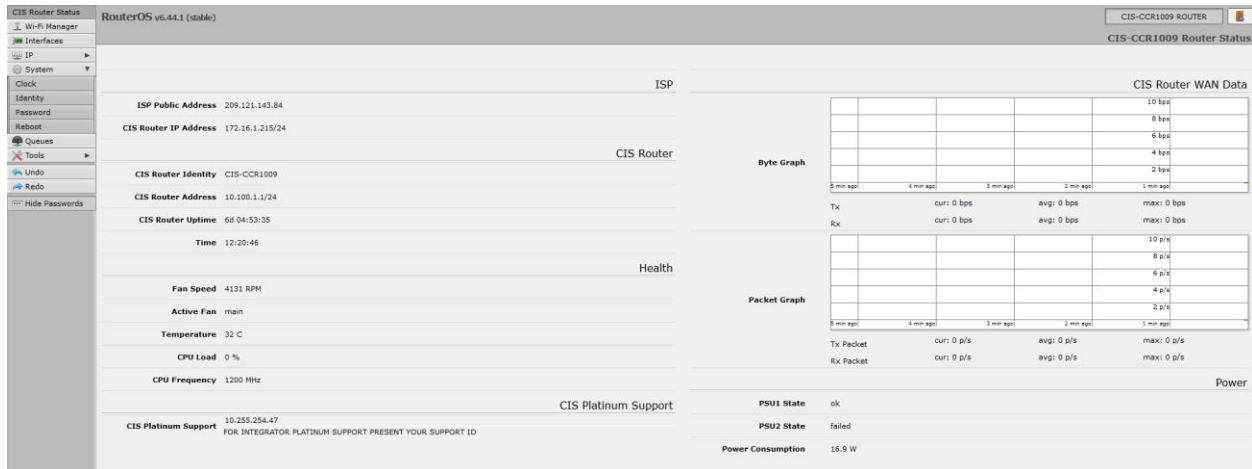
4 - Interface Access

1. Connect your laptop to any remaining port on the front of the CIS Router. Be sure that your computer is configured to DHCP mode.
2. Integrators may click the free TeamViewer link and contact CIS for remote assistance.
3. Discover the IP of the CIS Router by trying the default IP 10.100.1.1 Open a web browser and enter the IP address in the address bar of your web browser.



5 - Status Page

The status page provides a glance at some basic information. There is a CIS Support Address should you require assistance which should be in the format of 10.255.XXX.XXX. You will give this to a CIS Technician over the phone. Router Identity will show you which router you are accessing on your network (Name), uptime, and load on the CPU.



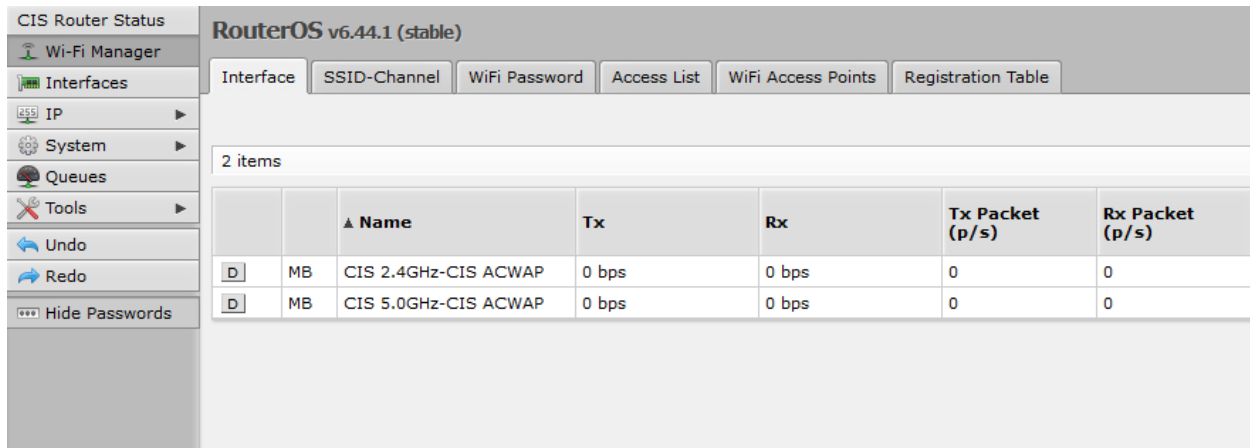
6 - Identity

Under “System>Identity” you can change the name of the device, this is useful for you to keep track of client devices if we name this after the client in this format: “Lastname_Firstname” Once this is done, it will be much easier to support and know which router you are logged into. We also suggest doing this as soon as possible if configuring the device.



7 - Wireless Manager

The wireless manager is an easy way to setup and configure all your CIS wireless access points. As you can see here, the first page you will see is “Interfaces”. This will more than likely be empty on a new unconfigured device, however, once we assign the WAPs (Wireless Access Points) to this manager, we will be able to see all of your configured WAPs!




RouterOS v6.44.1 (stable)

Interface | SSID-Channel | WiFi Password | Access List | WiFi Access Points | Registration Table

2 items

		▲ Name	Tx	Rx	Tx Packet (p/s)	Rx Packet (p/s)
<input type="checkbox"/>	MB	CIS 2.4GHz-CIS ACWAP	0 bps	0 bps	0	0
<input type="checkbox"/>	MB	CIS 5.0GHz-CIS ACWAP	0 bps	0 bps	0	0

Next is the “SSID-Channel”. Here you will see all the Wireless connections you can change the SSID. An SSID is the name of the wireless connection your WAPs will be displaying to your devices that want to connect wirelessly. You can change these individually, however, we do recommend if you are going to be utilizing 2.4GHz and 5.0GHz, that you keep the SSID the same on both radios to help with roaming between your WAPs.



RouterOS v6.44.1 (stable)

Interface | SSID-Channel | WiFi Password | Access List | WiFi Access Points | Registration Table

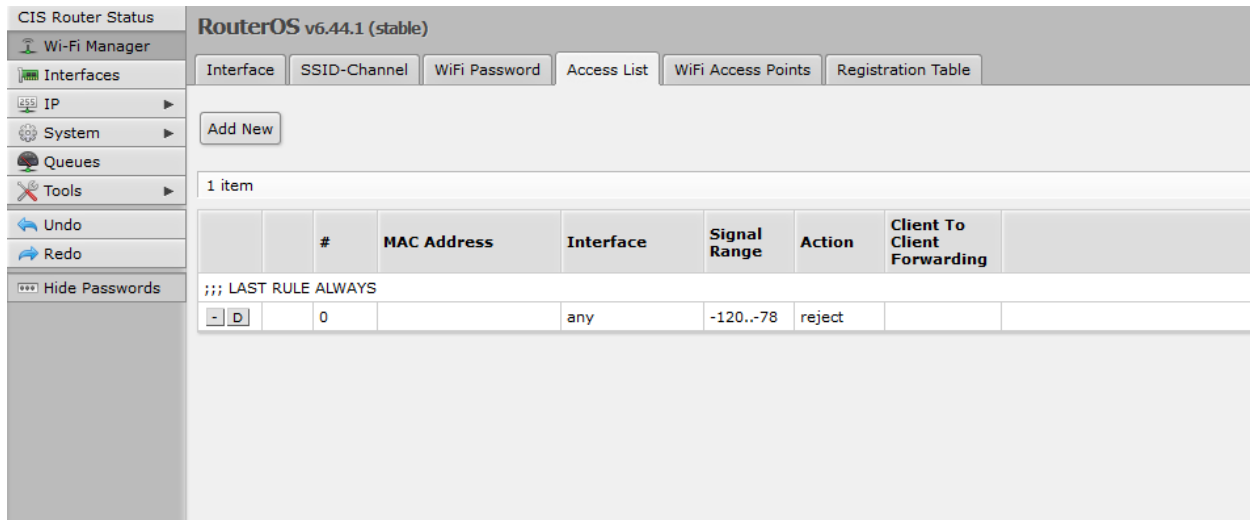
2 items

		▲ Name	SSID	Hide SSID	Channel
<input type="checkbox"/>		CIS 2.4GHz Wirele	CIS 2.4GHz Wirele	<input type="checkbox"/>	2.4GHz Channe
<input type="checkbox"/>		CIS 5GHz Wireles	CIS 5GHz Wireles	<input type="checkbox"/>	5GHz Channel

Here in the tab “WiFi Password” you will be able to change the password for your wireless. We suggest if you will have a lot of wireless users in the vicinity, and you only want certain users on wireless that you do not use an easy to remember password (phone numbers are heavily discouraged)

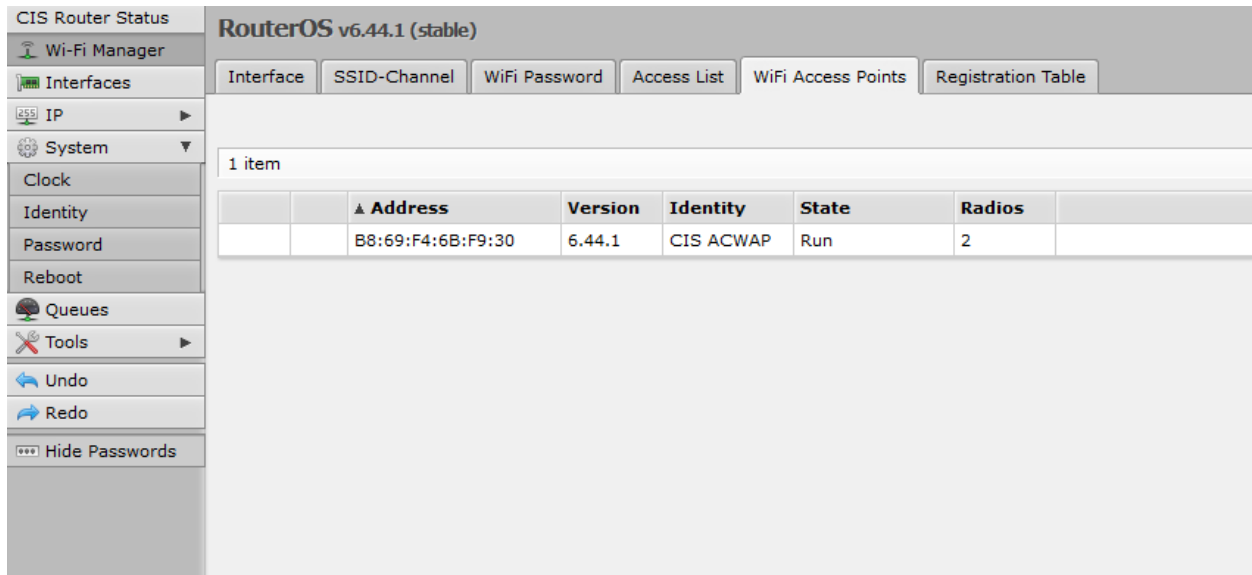


The tab “Access List” is how our wireless devices allow your mobile devices (phones, laptops, tablets) to “roam” through your network. What this means is that while you walk around where your WAPs are installed, your mobile wireless devices will try to find a WAP with a better signal, only if it’s receiving a poor signal from the current connection. You can determine what is considered a bad connection. Here is an example:



So essentially what you’re seeing here is that once the signal reaches -78db for a certain amount of time (can be changed by clicking on it) your device will look for better signal coming from another WAP. Also, you can add other access list rules to restrict access depending on your network. Just make sure our default rule is the last rule always as you can see as it’s commented out.

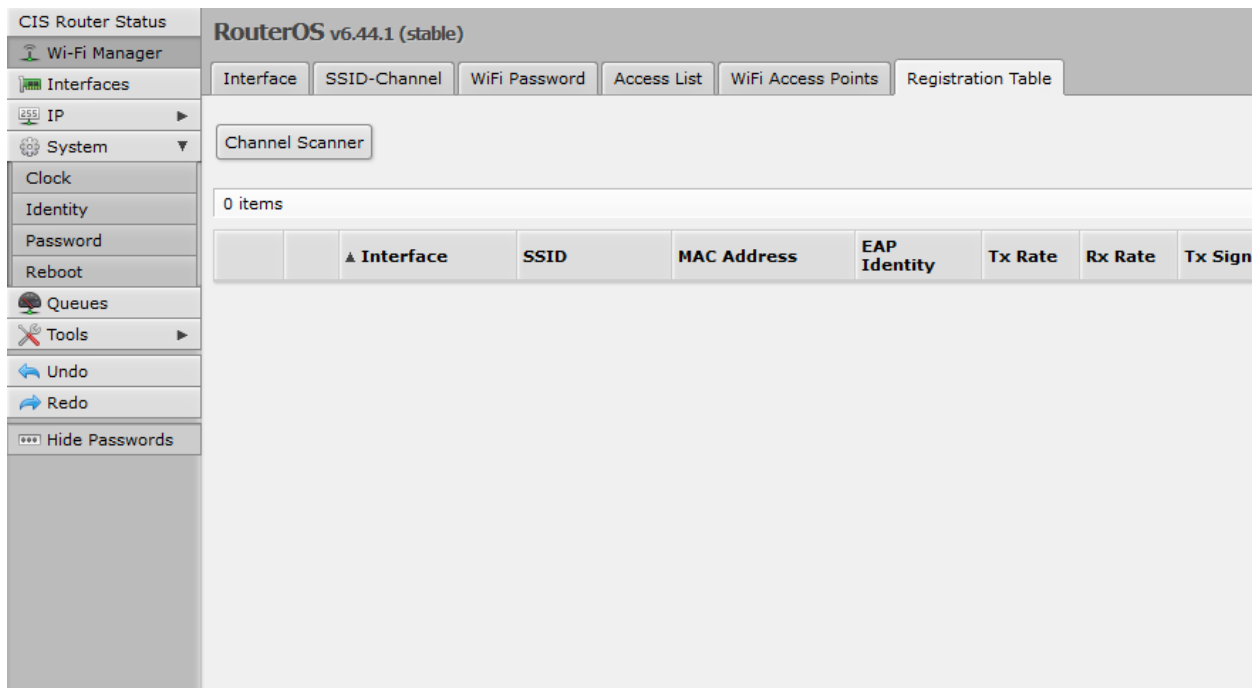
In the tab “WiFi Access Points” you will see all currently connected WAPs. This is different to the “Interface” tab in the sense that this will only show connected WAPs and you cannot change any configuration in this tab. It is only here for reference. While “Interface” will show configured WAPs and you can change settings for each WAP in that tab.



The screenshot shows the RouterOS v6.44.1 (stable) interface. The left sidebar contains navigation options: CIS Router Status, Wi-Fi Manager, Interfaces, IP, System, Clock, Identity, Password, Reboot, Queues, Tools, Undo, Redo, and Hide Passwords. The main content area is titled "RouterOS v6.44.1 (stable)" and has several tabs: Interface, SSID-Channel, WiFi Password, Access List, WiFi Access Points, and Registration Table. The "Registration Table" tab is active, showing a table with 1 item. The table has columns for Address, Version, Identity, State, and Radios.

Address	Version	Identity	State	Radios
B8:69:F4:6B:F9:30	6.44.1	CIS ACWAP	Run	2

Here in the next tab “Registration Table” you will be able to see all current connected wireless devices. You can reference the MAC Address here to cross reference your DHCP leases. Which we will go over later in this manual.



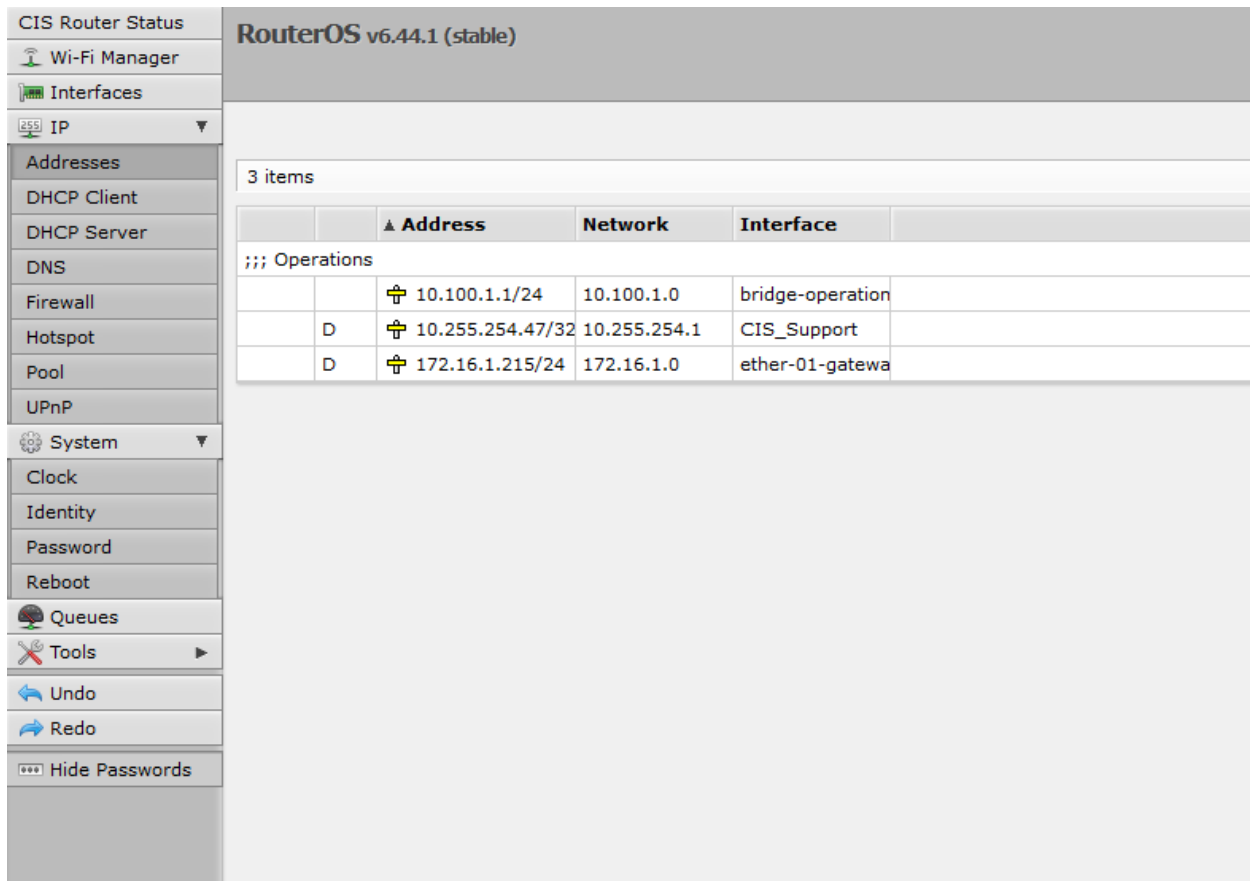
The screenshot shows the RouterOS v6.44.1 (stable) interface. The left sidebar is identical to the previous screenshot. The main content area is titled "RouterOS v6.44.1 (stable)" and has several tabs: Interface, SSID-Channel, WiFi Password, Access List, WiFi Access Points, and Registration Table. The "Channel Scanner" tab is active, showing a "Channel Scanner" button and a table with 0 items. The table has columns for Interface, SSID, MAC Address, EAP Identity, Tx Rate, Rx Rate, and Tx Sign.

Interface	SSID	MAC Address	EAP Identity	Tx Rate	Rx Rate	Tx Sign.
0 items						

8 - Addresses

The IP<Addresses tab is where all IP addresses tied to your router are displayed. By default the router is set to DHCP and will acquire an IP address. In this case the router has an IP address of

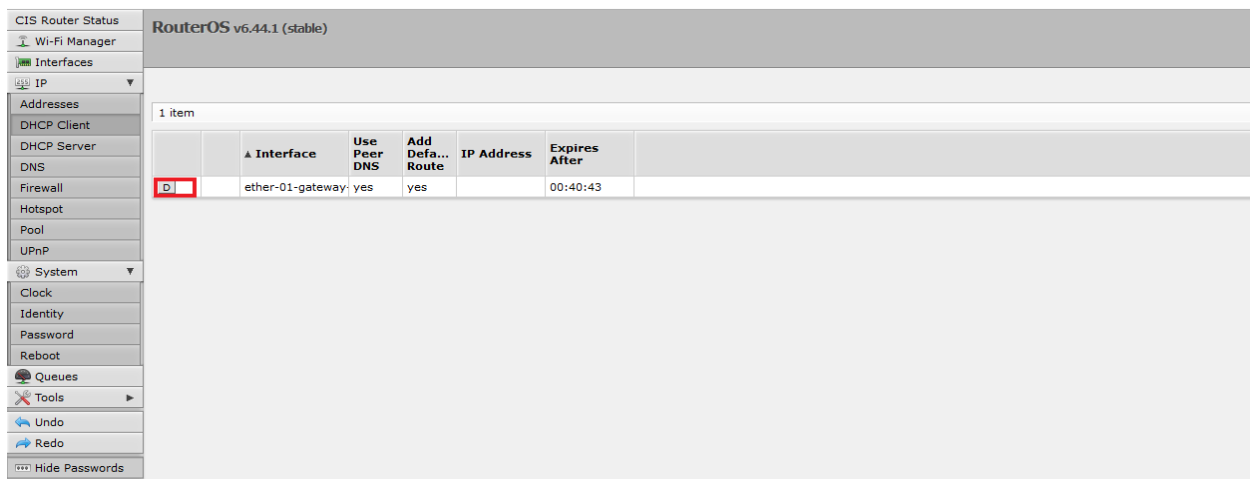
10.100.1.1 (our default) The router will support 172.16.1.0/24, 10.100.1.0/24, 192.168.1.0/24, and 192.168.0.0/24 networks by default. Should you have a different network address please contact CIS Services for assistance. This is an easy place to check our CIS Support 10.255.XXX.XXX number if its not on the main status page. Also, you can easily see if “ether-01-gateway” IP address is a public IP or private IP, which is an issue if you’re not in bridge mode. For more information feel free to call us for assistance if your having an issue getting your router into bridge mode which we heavily suggest.



The screenshot shows the RouterOS v6.44.1 (stable) interface configuration page. The left sidebar contains a menu with options like IP, Addresses, DHCP Client, DHCP Server, DNS, Firewall, Hotspot, Pool, UPnP, System, Clock, Identity, Password, Reboot, Queues, Tools, Undo, Redo, and Hide Passwords. The main content area shows the IP configuration table with 3 items:

	▲ Address	Network	Interface
;;; Operations			
	⊕ 10.100.1.1/24	10.100.1.0	bridge-operation
D	⊕ 10.255.254.47/32	10.255.254.1	CIS_Support
D	⊕ 172.16.1.215/24	172.16.1.0	ether-01-gatewa

DHCP Client will present you with the current IP handed out from your router to the router. This interface can be enabled, or disabled by clicking on the “D” on the left column (very few situations where you need to disable this, however, with PPPOE connections you will need to) . Alternatively you may select to advance to the interface by clicking on the IP address.



The screenshot shows the RouterOS v6.44.1 (stable) DHCP Client configuration page. The left sidebar is the same as in the previous screenshot. The main content area shows the DHCP Client configuration table with 1 item:

	▲ Interface	Use Peer DNS	Add Defa... Route	IP Address	Expires After
<input type="checkbox"/>	ether-01-gateway	yes	yes		00:40:43

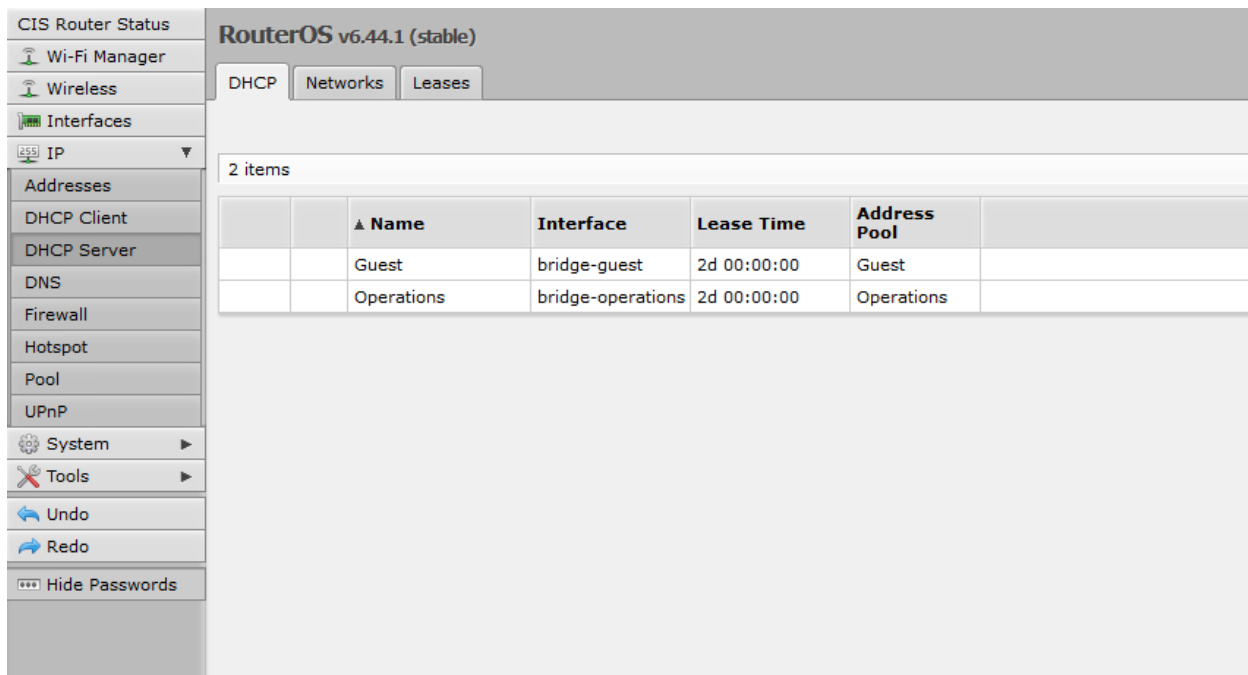
9- DHCP Server

This is where your router is configured to send out an IP Address to all of your devices. You can set static IP assignments based on MAC Address here and also see all your connected devices.

The first tab though is a list of the current DHCP Networks you have, which depending on the scale of your network and different kinds of users you may need. If you are unsure if you need an additional network, contact us immediately as we can talk you through what you may need! If you need an additional network feel free to go to our website and purchase an additional network:

[CIS Additional Network](#)

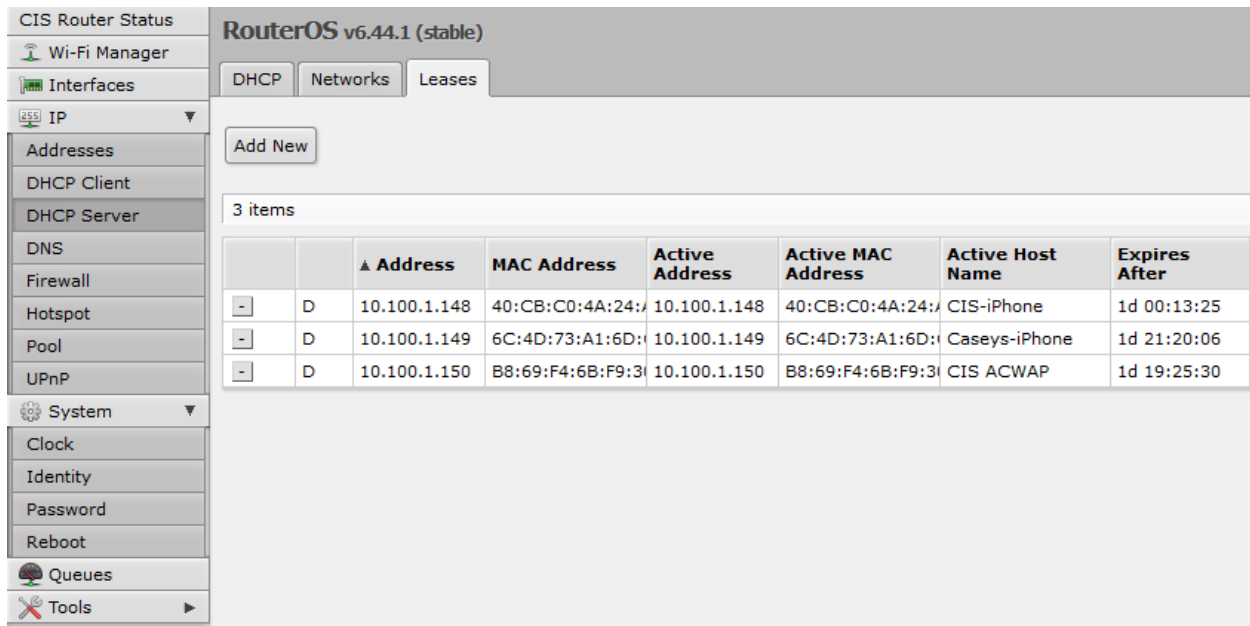
The next tab will be “Networks” which is just a more detailed listing of all the IP Addresses tied to each purchased additional and default networks. With the Gateway address, and DNS Servers as well.



	▲ Name	Interface	Lease Time	Address Pool
	Guest	bridge-guest	2d 00:00:00	Guest
	Operations	bridge-operations	2d 00:00:00	Operations

In the “Leases” tab you will see a list of devices your router has assigned an IP Address. You can statically assign any device in this menu by clicking on it. Hitting the button “Make Static”, hitting the close button. Then click on it again and now you can manually set the IP out of the IP Pool. The default IP Pool is 10.100.1.100–10.100.1.150, however, the range of the subnet is actually fully 10.100.1.2–10.100.1.254 . So setting an IP Address outside is recommended for any device that will be always “on” the network (Cameras, Servers, other network equipment).

Example: I have 3 CIS-ACWAP’s so I want to set all three of them to be outside of the IP Pool which the router will automatically assign to any device. To make sure the pool isn't completely used by devices that will always be on we should statically set these devices: I personally like to assign and label working my way down. So I set the first WAP to 10.100.1.254, then 10.100.1.253 for the next, and 10.100.1.252 for the last.



The screenshot shows the RouterOS v6.44.1 (stable) interface for the DHCP Leases page. The left sidebar contains navigation options: CIS Router Status, Wi-Fi Manager, Interfaces, IP (selected), Addresses, DHCP Client, DHCP Server, DNS, Firewall, Hotspot, Pool, UPnP, System, Clock, Identity, Password, Reboot, Queues, and Tools. The main content area has tabs for DHCP, Networks, and Leases. Below the tabs is an 'Add New' button and a table showing 3 items.

		▲ Address	MAC Address	Active Address	Active MAC Address	Active Host Name	Expires After
-	D	10.100.1.148	40:CB:C0:4A:24:7A	10.100.1.148	40:CB:C0:4A:24:7A	CIS-iPhone	1d 00:13:25
-	D	10.100.1.149	6C:4D:73:A1:6D:00	10.100.1.149	6C:4D:73:A1:6D:00	Caseys-iPhone	1d 21:20:06
-	D	10.100.1.150	B8:69:F4:6B:F9:30	10.100.1.150	B8:69:F4:6B:F9:30	CIS ACWAP	1d 19:25:30

10- Firewall

Your Firewall is where we allow or disallow certain traffic, or even forward certain traffic depending on your needs.

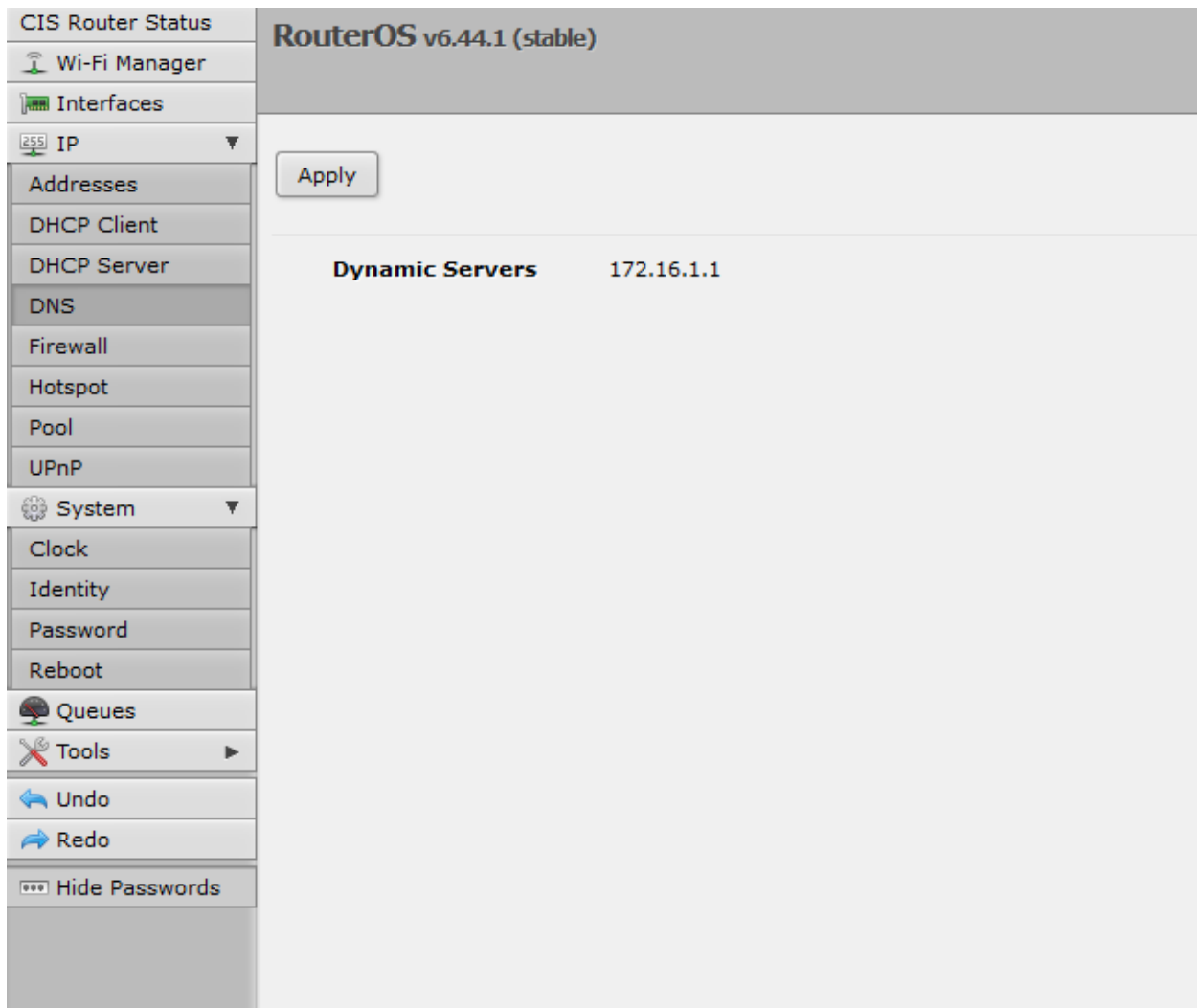
When accessing the firewall you will see a list of items that specifically say “DO NOT CHANGE” this is important as these are all proprietary firewall entries we enter to make sure traffic is flowing correctly and securely on your network. If you happen to disable or remove any of these rules with that label you will have service interruption on device. So please make changes in this area at your own risk!

However, there also should be a disabled rule called “Port-Forward Sample” this is a sample to help with port-forwarding if you need to forward certain ports for a device on your network. Only do this if the functionality of your device can only work with port forwarding.

We heavily recommend NOT using port forwarding if there is a choice as this opens up a port vulnerability on the network. For more information feel free to give us a call.

11 - DNS

DNS is to show the current dynamic DNS servers currently.



The screenshot shows the RouterOS v6.44.1 (stable) web interface. The left sidebar contains a navigation menu with the following items: CIS Router Status, Wi-Fi Manager, Interfaces, IP (selected), Addresses, DHCP Client, DHCP Server, DNS (highlighted), Firewall, Hotspot, Pool, UPnP, System, Clock, Identity, Password, Reboot, Queues, Tools, Undo, Redo, and Hide Passwords. The main content area displays the DNS configuration for the selected IP. It features an 'Apply' button at the top left. Below it, the 'Dynamic Servers' section shows a single entry: 172.16.1.1.

Dynamic Servers	172.16.1.1

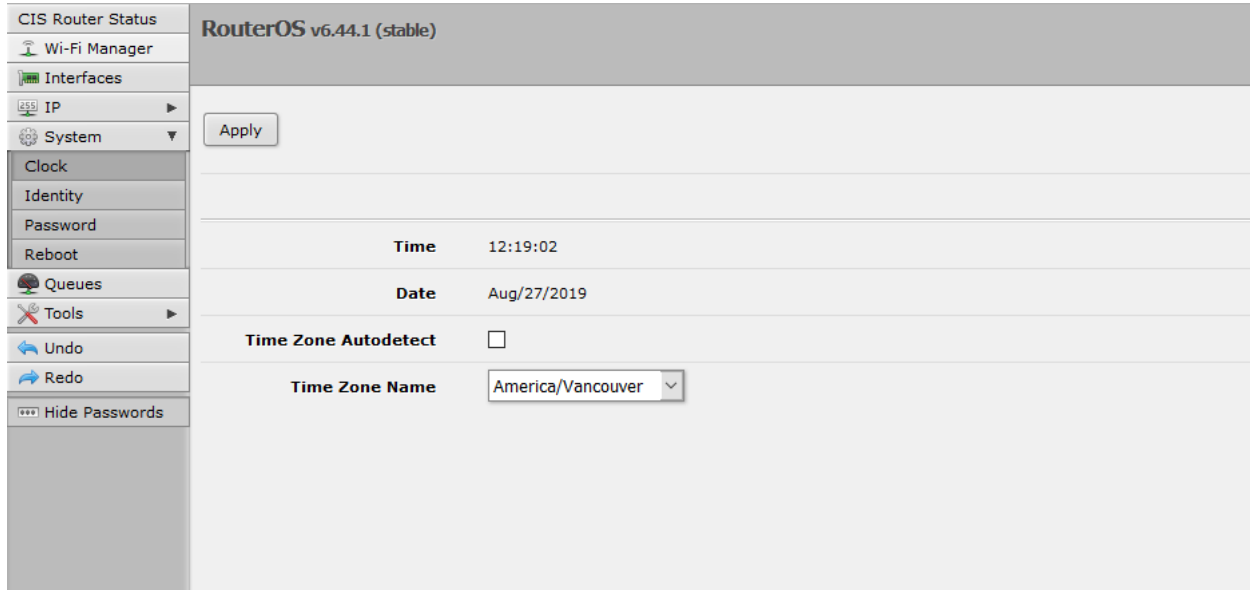
12 - UPnP

CIS supports Universal Plug and Play architecture for transparent peer-to-peer network connectivity of network-enabled intelligent devices or appliances.

UPnP enables data communication between any two devices under the command of any control device on the network. Universal Plug and Play is completely independent of any particular physical medium. It supports networking with automatic discovery without any initial configuration, whereby a device can dynamically join a network. DHCP and DNS servers are optional and will be used if available on the network. UPnP implements simple yet powerful NAT traversal solution, that enables the client to get full two-way peer-to-peer network support from behind the NAT.

13 - Clock

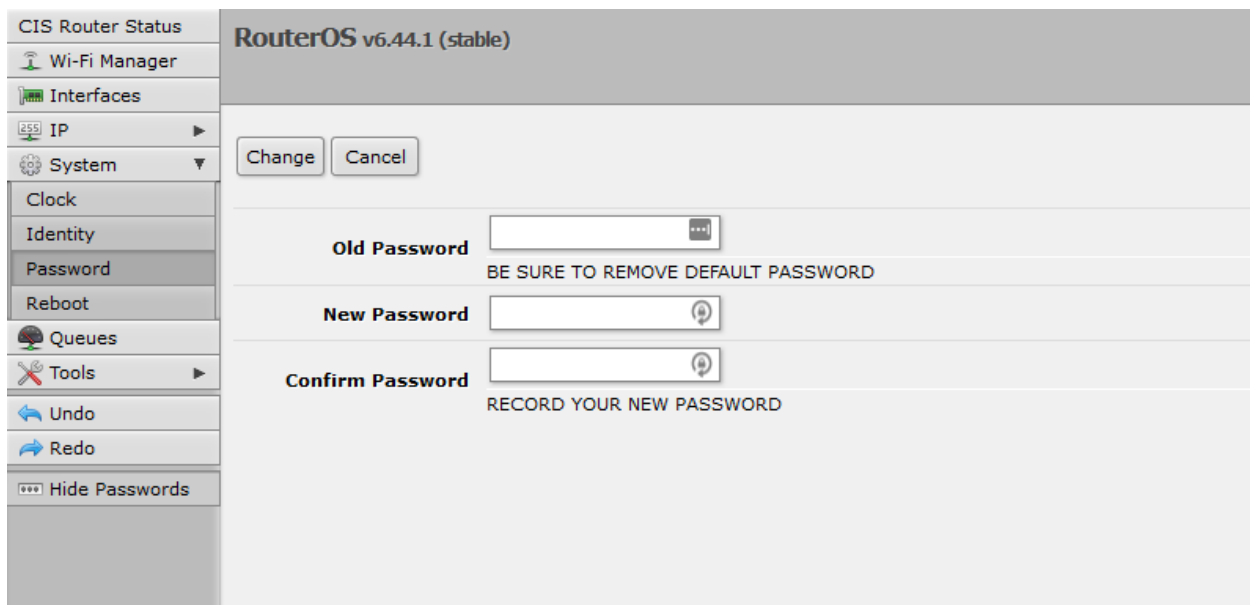
CIS uses data from the time zone database, Most of the time zones from this database are included, and have the same names. Currently only information starting from 2005 is included.



The screenshot shows the RouterOS v6.44.1 (stable) configuration interface. The left sidebar contains a menu with options: CIS Router Status, Wi-Fi Manager, Interfaces, IP, System, Clock (selected), Identity, Password, Reboot, Queues, Tools, Undo, Redo, and Hide Passwords. The main content area is titled 'RouterOS v6.44.1 (stable)' and features an 'Apply' button. Below the button, the current system time is displayed as 12:19:02 and the date as Aug/27/2019. There is an unchecked checkbox for 'Time Zone Autodetect' and a dropdown menu for 'Time Zone Name' currently set to 'America/Vancouver'.

14 - Password

The default username is **cis** and the password is **integration**. After you log in for the first time, please create a new a password



The screenshot shows the RouterOS v6.44.1 (stable) configuration interface for the Password section. The left sidebar is identical to the previous screenshot, with 'Password' selected. The main content area is titled 'RouterOS v6.44.1 (stable)' and features 'Change' and 'Cancel' buttons. Below these buttons, there are three password input fields: 'Old Password' (with a 'BE SURE TO REMOVE DEFAULT PASSWORD' warning), 'New Password' (with a strength indicator), and 'Confirm Password' (with a 'RECORD YOUR NEW PASSWORD' warning). Each input field has a 'Hide Passwords' icon on its right side.

15- Reboot

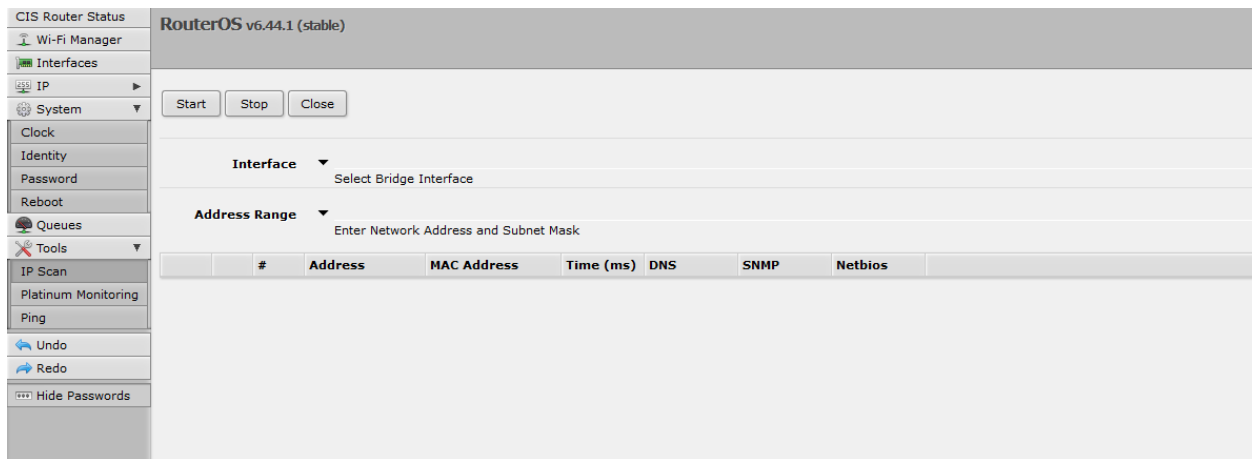
We discourage reboot unless directed by CIS, however, if through needed for troubleshooting we give the option. Clicking reboot will ask for confirmation of a reboot.

16 - IP Scan

IP Scan tool allows user to scan network based on some network prefix or by setting interface to listen to. Either way tool collects certain data from the network. When using IP scan tool user must choose what it wants to scan for:

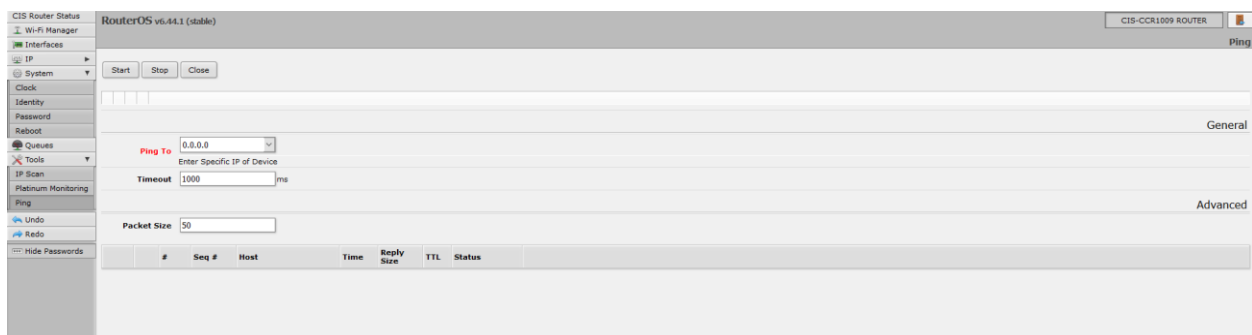
1. Certain IPv4 prefix

- Tool will attempt to scan all the addresses or address set in address.
- Interface of the router
 - Tool will attempt to listen to packets that are "passing by" and attempt to compile results when something is found



17 - Ping

Ping uses Internet Control Message Protocol (ICMP) Echo messages to determine if a remote host is active or inactive and to determine the round-trip delay when communicating with it. Ping tool sends ICMP (type 8) message to the host and waits for the ICMP echo-reply (type 0). The interval between these events is called round trip. If the response (that is called ping) has not come until the end of the interval, we assume it has timed out. The second significant parameter reported is TTL (Time to Live) is decremented at each machine in which the packet is processed. The packet will reach its destination only when the TTL is greater than the number of routers between the source and the destination.



18 - Undo Redo

On the Main toolbar's left side is located undo and redo buttons to quickly undo any changes made to configuration. They are identifiable by the blue arrows going left and right.

19 - Hide Password

Selecting the Hide Passwords button will reveal or hide passwords related to Wi-Fi passwords, Hotspot passwords and more.

20- Warranty Information

Custom Integration Solutions™ products have a 2-Year Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products that have been abused, modified, or disassembled. Products to be repaired under this warranty must be returned to Custom Integration Solutions™ or a designated service center with prior notification and an assigned return authorization (RA) number.

Contact Information Web: www.custom-integration-solutions.com
Phone: Technical Support - (888) 976-3651
Email: activations@custom-integration-solutions.com

The CIS-CCR1009 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC.

