

Table of Contents

Welcome to Custom Integration Solutions	
Overview	
Package Contents	
Power	
Indoor use only	
Device Details	5
Ports	5
LED Indicators	5
Buttons	5
Mounting Options	6
Wall Mount	6
Ceiling Mount	
Low Voltage Mounting Brackets	8
Quick Setup	9
Accessing the Web Interface	
The Status Page	10
Setting the Access Point's Identity	11
Undo / Redo	12
Show / Hide Passwords	
Rebooting the Device	12
Changing the Default Password	13
Setting the Time Zone	
IP Addressing	14
The DHCP Client Tab	14
Renewing the IP Address	14
Setting a Static IP Address	15

Managing Access Points with the Wireless Manager	17
Linking CIS Access Points to the Wi-Fi Manager	17
Viewing the Connected Access Points	18
Viewing Connected Devices	18
Changing the SSID of Managed Access Points	19
Changing the Wi-Fi Password of Managed Access Points	19
Configuring Access Points in Standalone Mode	21
Setting the Wi-Fi Password for Standalone Access Points	22
Enabling the Guest Network on Standalone Access Points	23
To change the password, click the Security Profiles tab in the Wireless menu. Click the Guest secur profile and change the password, just like you did for the main network	-
View Connected Devices	24
Setting up the Access Point as a Repeater	24
Tools	25
UPnP	25
Ping	25
IP Scan	26
Wireless Scanner	26
Troubleshooting	27
Warranty Information	29
Contact Information	29

Welcome to Custom Integration Solutions

Thank you for purchasing CIS devices. Our solutions make it easy for integrators to deploy networks in home and business settings with minimal configuration. Our support team is here to assist with setting up equipment and answering your network related questions.

Overview

CIS wireless access points provide a compact and powerful solution for your home and commercial connectivity needs. The CIS WAPXL provides the power of our ACWAP with increased range. Link it to the Wi-Fi manager and control it with your CIS router, just like our other access points.

Package Contents



Power

The WAPXL is powered via PoE through a PoE capable router or switch, or via the included PoE injector.

The PoE input on Ether1 accepts 24V passive PoE, or 48V 802.3af/at (PoE and PoE+).

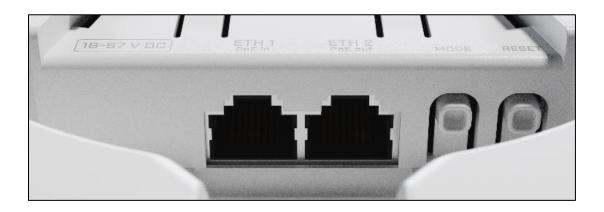
• Ether2 supports PoE passthrough (passive PoE only, up to 57V), so you can link multiple PoE devices together.

The maximum power consumption of the device is 24W with attachments, and 11W without.

Indoor use only

The CIS-WAPXL is designed for indoor use only. Avoid installing the CIS-WAPXL in wet or damp areas.

Device Details



Ports

- ETHER1 (PoE in) connect to your router or switch. Accepts passive and 802.3af/at PoE.
- ETHER2 connect to another access point or device. • Can pass-through up to 57V passive PoE.

LED Indicators

- USR (Top) Flashes when the access point is about to be reset.
- 5G Indicates activity on the 5 GHz interface
- 2G Indicates activity on the 2.4 GHz interface
- E2 Lights up when Ethernet 2 is connected. Indicates activity.
- E1 Lights up when Ethernet 1 is connected. Indicates activity.
- PoE Lights up when PoE is passed-through on Ether2.
- Power (bottom) Lights up when the access point is powered.



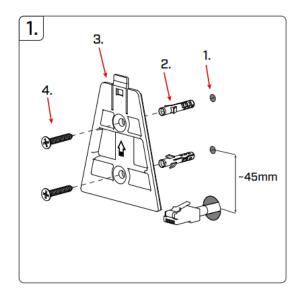
- Center button: Press to enable and disable the LEDs on the access point.
- Mode button (back) Also enables and disables the LEDs on the access point.
- Reset button: Hold this button while the device is powered off, then apply power. Keeping holding until the USR LED light starts flashing, (5 seconds) then release the button to reset to the default CIS configuration. You can use this procedure if you have forgotten the password to access the device, or simply wish to return the unit to its default configuration state.



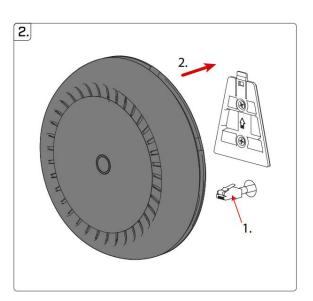
Mounting Options

The CIS-WAPXL has multiple mounting options for walls, ceilings, and low-voltage mounting brackets.

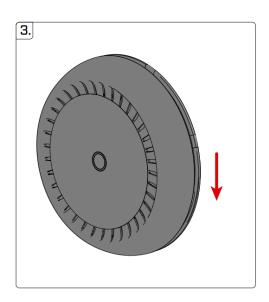
Wall Mount



- 1. Drill two 4.5-5mm holes.
- 2. Insert the plastic anchors.
- 3. Place the mount on the wall.
- 4. Secure the mount with screws.

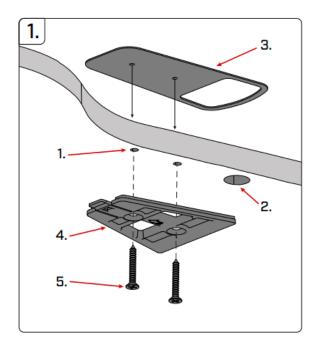


- 1. Plug the Ethernet cable into Ether1.
- 2. Move the access point into position.

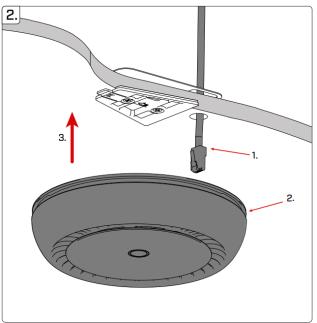


Slide the access point down until it snaps into place.

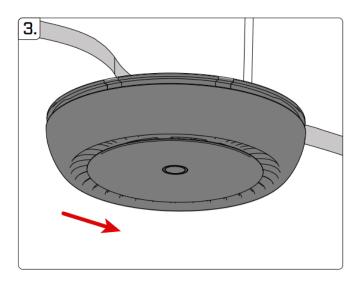
Ceiling Mount



- 1. Drill two 4.5-5mm holes for the screws.
- 2. Drill a hole for the ethernet cable.
- 3. Attach the metal plate on the other side of the ceiling panel.
- 4. Align the access point mount with the screw holes.
- 5. Use the screws to tighten the mount to the plate.

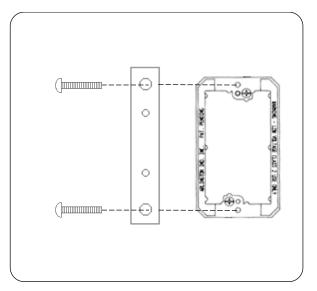


- 1. Thread the ethernet cable through the hole in the metal plate.
- 2. Insert the ethernet cable to Ether1 of the access point.
- 3. Position the access point ahead of the mount.



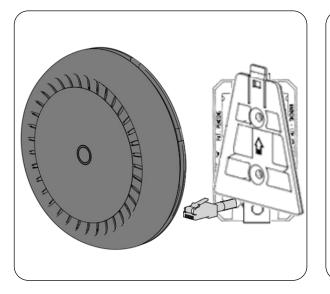
Slide the access point towards the mount until it snaps into place.

Low Voltage Mounting Brackets

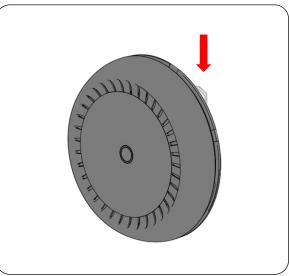


Attach the metal strip to the low voltage gang box using the included screws.

Attach the mounting bracket to the metal strip using the flathead screws.

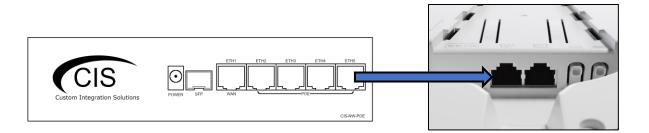


Connect the ethernet cable to Ether1 of the access point.



Slide the access point onto the mount until it snaps into place.

Quick Setup



- 1. Connect the Ethernet cable from your router to Ether1 on the access point. If your router supports PoE, turn it on to power the device. If not, use the included PoE injector.
- 2. (Optional) Connect an additional access point or device to Ether2. The port is bridged, meaning it acts like a switch port. If the connected device supports passive PoE, it will be passed through to it.
- 3. The access point will receive an IP address via DHCP. Access the DHCP leases on your router page to find the IP address of the access point, then enter the IP address in a web browser to view the configuration (next page).

Accessing the Web Interface

- 1. Connect your laptop or PC to the router.
- Obtain the IP address of your access points. If you're using a CIS router, access the web configuration by typing 10.100.1.1 in a web browser (10.100.1.1 is the default, but some systems may be different). Once logged in with the default credentials of cis and integration as the password, select IP > DHCP Server and view the Leases tab.

Interfaces	DHCP	Netw	orks Leases					
255 IP 🔻		_						
Addresses	Add Ne	w						
DHCP Client								
DHCP Server	2 items	;						
DNS				мас	Active	Active		
Firewall			Address	Address		MAC Address	Active Host Name	Expires After
Hotspot	-	D	10.100.1.100	64:D1:54:	10.100.1.100		CIS-SW-POE4	1d 22:58:20
Pool	-	D	10.100.1.101				CIS-WAPXL	1d 23:59:46
UPnP		-						

- 3. Enter the IP address of the access point in the address bar of your web browser.
- 4. To login, use the default credentials **cis** and **integration** as the password.
- 5. Integrators may use the Get TeamViewer link if remote assistance is required.

The Status Page

The status page provides basic diagnostic information. There is a CIS Support Address should you require assistance. You can view the identity (name) of the access point you are connected to, view it's public address, the traffic flowing through the device, and identify the MAC addresses of its interfaces.

CIS-WAPXL		
You have connected to an access point. Administrat your possession, please contact your local network		
CIS Login:		Custom Integration Solutions
Login: <mark>cis</mark>	Login	
Password: integration		

RouterOS v6.47.7 (stable)	1					CIS 2.4/50	GHz WAP
Rodeeroo vo.47.7 (Suble)					070 1011		
					CIS ACW	AP 2.4/5GH	z Access Point
		ISP Public Address				1.0 Mbps	
Public Address	99.1					800.0 kbps	
Public Address	99.1					600.0 kbps	
		CIS ACWAP	Byte Graph			400.0 kbps	
Identity						200.0 kbps	
	10 100 1 100/01			1 ago	2 min ago	1 min ago	
IP Address	10.100.1.193/24			— Тх		avg: 89.9 kbps	607.6 KDps
LAN MAC Address	48:8F:			— Rx	cur: 24.2 kbps		max: 82.2 kbps
WLAN MAC Address	48:8F:					100 p/s	
						80 p/s	
		Resources				60 p/s	
CPU Load	0 %		Packet Graph			40 p/s	Lange Land
CPU Frequency	716 MHz				2 min ago	20 p/s	V V V V
				Tx Packet	cur: 18 p/s	1 min ago avg: 18 p/s	max: 74 p/s
CPU Count	4			Rx Packet	cur: 22 p/s	avg: 21 p/s	max: 59 p/s
Rate	1Gbps					CIS Plati	num Support
Uptime	1d 22:33:49		Support Address	10.255.254.226 FOR INTEGRATO		PORT PRESENT A	CCESS NUMBER

Setting the Access Point's Identity

The identity is used to identify your device on the network. Troubleshooting will become easier when you set the identity correctly. Set the identity of the access point based on its location E.g., Basement.

The **Identity** setting can be found in the **System** tab in the left toolbar.

CIS ACWAP Status	RouterOS v6.47.7 (stable)	CIS 2.4/5GHz WAP
Wireless		
The CIS Support		Identity
255 IP 🕨		
🔯 System 🔻	Apply	
Clock		
Identity	Garage	
Note	Format "Location"	
Password		

Undo / Redo

Undo and Redo buttons are located in the left toolbar. You may use them to quickly undo/redo any changes made to configuration.

CIS Router Status	
🔔 Wi-Fi Manager	
Interfaces	
IP	•
🔯 System	•
🔀 Tools	•
🥎 Undo	
🌈 Redo	
Hide Passwords	

Show / Hide Passwords

Selecting the **Hide Passwords** button in the left toolbar will toggle the displaying of passwords related to Wi-Fi, Hotspot, and more.

🥎 Undo
🎓 Redo
Hide Passwords

Rebooting the Device

If you are having ongoing issues with your network and suspect a reboot will help, the **Reboot** option can be found in the **System** tab in the left toolbar. Clicking reboot will ask for confirmation before proceeding.

🔯 System 🛛 🔻
Clock
Identity
Note
Password
Reboot

Changing the Default Password

After you log in for the first time, please create a new a password to increase the security of the device. Enter the old password in the top field and a secure password in the new and confirm password fields.

CIS ACWAP Status	RouterOS v6.47.7 (sta	ble)	CIS 2.4/5GHz WAP	
Q Wireless	100000000000000000000000000000000000000	5107	· · ·	
The CIS Support				Change
255 IP 🕨				
🔯 System 🔻	Change Cancel			
Clock				
Identity	Old Password		٩	
Note		BE SURE TO REMOVE DEFAIL	JLT PASSWORD	
Password	New Password		@	
Reboot			2	
🔀 Tools 🔹 🕨	Confirm Password		(D)	
🥎 Undo		RECORD YOUR NEW PASSW	ORD	
🎓 Redo				
Hide Passwords				

Setting the Time Zone

You can find the Clock settings under the System tab in the left toolbar. Select your time zone from the drop-down menu.

CIS ACWAP Status	RouterOS v6.47.7 (stable)	[CIS 2.4/5GHz WAP	
Wireless	,	L		
The CIS Support				Clock
IP 🕨				
🔯 System 🔻	Apply			
Clock				
Identity				Time
Note				
Password	Time	11:43:18		
Reboot	Date	Apr/23/2021		
🔀 Tools 🔹 🕨				
🕎 Undo	Time Zone Autodetect	✓		
🎓 Redo	Time Zone Name	America/Vancouve	er 🗸	
- Hide Passwords				

IP Addressing

The DHCP Client Tab

The DHCP Client tab will present you with the IP address assigned to your access point from the router. CIS recommends creating a DHCP reservation for access points and other network infrastructure devices.

CIS ACWAP Status	Route	rOS v6.47.7 (stable)		CIS 2.4/5GHz WAP
Wireless				
The CIS Support				DHCP Client
255 IP 🔻				
Addresses	1 item			
DHCP Client	1 100111			
DHCP Server		▲ Interface	IP Address	
DNS	D	bridge-operations	10.100.1.193/24	
Pool				
UPnP				

Renewing the IP Address

Once you've clicked the entry under the **DHCP Client** option, click the **Renew** button to obtain a new lease.

CIS ACWAP Status	RouterOS v6.47.7 (stable)	CIS 2.4/5GHz WAP
Q Wireless		
argentary CIS Support	D	HCP Client <bridge-operations></bridge-operations>
255 IP 🔻		
Addresses	OK Cancel Apply Renew	
DHCP Client		
DHCP Server	Status: bound	not invalid
DNS	Enabled 🗸	
Pool		
UPnP		DHCP
🔯 System 🕨		
🔀 Tools 🔹 🕨	Interface bridge-operatio	ns
🥎 Undo		Status
🎓 Redo		otatab
Hide Passwords	IP Address 10.100.1.193/2	4

Setting a Static IP Address

To set a static IP, select the **Addresses** tab under the **IP** section in the toolbar. There is an IP address entry that is disabled by default. Click on it.

CIS ACWAP Status	Route	rOS	6.47.7 (stable)	CIS 2.4/5GHz	z WAP	
Q Wireless			or in (stable)		L	
🏣 CIS Support						Address List
255 IP 🔻						
Addresses	4 items					
DHCP Client	4 items					
DHCP Server			▲ Address	Network	Interface	
DNS	E	Х	🕆 10.100.1.2/24	10.100.1.0	bridge-operation:	
Pool		D	+ 10.100.1.193/24	10.100.1.0	bridge-operation:	
UPnP		D	+ 10.255.254.226/3	10.255.254.1	CIS_Support	
🔯 System 🕨	D		+ 192.168.20.1/24	192.168.20.0	bridge-guest	

If your network falls in one of the ranges below, you can set the static IP address yourself. If it is outside of these ranges, you must call CIS to have a route created on the access point!

Available address ranges	:		
172.16.1.0/24	10.100.1.0/24	192.168.1.0/24	192.168.0.0/24

Check the **Enabled** box, then enter the IP address you would like to use. It MUST be in the range of your network, and outside of the range of the DHCP pool. The format must include **/24** at the end. This is the subnet mask, which determines how many devices can be connected to this network.

CIS ACWAP Status	RouterOS v6.47.7 (stab	le)	CIS 2.4/5GHz WAP
Q Wireless			
argent CIS Support			Address <10.100.1.2/24>
255 IP 🔻		_	
Addresses	OK Cancel Apply	¥	
DHCP Client			
DHCP Server	not invalid		
DNS	Enabled	×	
Pool			
UPnP	Address	10.100.1.254/24	
🔯 System 🕨	Network	10.100.1.0	
🗙 Tools 🛛 🔻	Network	10.100.1.0	
IP Scan	Interface	bridge-operations	

Once the static IP aSddress is set, disable the DHCP client. Go to IP > DHCP Client and click on the entry. Click on the small 'D' button to disable it.

CIS ACWAP Status	RouterOS	v6.47.7 (stable)		CIS 2.4/5GHz WAP
Wireless				
'a CIS Support				DHCP Client
🏥 IP 🛛 🔻				
Addresses	1 item			
DHCP Client	1 10011			
DHCP Server		▲ Interface	IP Address	
DNS	D	bridge-operations	10.100.1.193/24	

Managing Access Points with the Wireless Manager

All CIS routers include a Wireless Manager that allows you to manage your access points from a single location. All changes to SSIDs, passwords and other options will be propagated to all CIS access points on the network.

Linking CIS Access Points to the Wi-Fi Manager

Select the **Wireless** section in the left toolbar. Under the **WiFi Interfaces** tab, select **Wi-Fi Manager**.

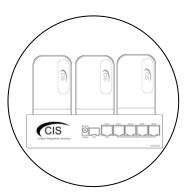
CIS ACWAP Status	Route	rOS v	6.47.7 (stable)		CIS 2.4/	5GHz WAP			
🔍 Wireless									
argent CIS Support	WiFi Int	erfaces	Access List Registrati	ion Security Profiles		Wireless Tables			
IP 🕨				_					
🔯 System 🕨	Wi-Fi M	Wi-Fi Manager Setup Repeater Scanner							
🔀 Tools 🔹 🕨									
🥎 Undo	4 items								
🎓 Redo			▲ Name	Туре	Actual MTU	Tx			
Hide Passwords	D	s	wlan1-2.4GHz	Wireless (IPQ4019)	1500	0 bps			

Check the **Enabled** box, click Apply, then OK.

CIS ACWAP Status	RouterOS v6.47.7 (stable)	CIS 2.4/5GHz WAP
🔍 Wireless	······	
arguing CIS Support		Wi-Fi Manager
255 IP 🕨		
🔯 System 🕨	OK Cancel Apply	
🔀 Tools 🔹 🕨		
🥎 Undo	Enabled 🗹	

The device will display the message --- managed by CAPsMAN. The Access point is now linked to your CIS router and can be managed through the router's configuration page.

man	managed by CAPsMAN									
E	E XS wlan1-2.4GHz Wireless (IPQ4019) 1500 0 bps									
man	aged b	y CAPsMAN								
E	E XS wlan2-5GHz Wireless (IPQ4019) 1500 0 bps									



Viewing the Connected Access Points

On your CIS router, select the **Wi-Fi Manager** section in the left toolbar. The active Wi-Fi radios will be displayed.

CIS Router Status	Route	CIS-NW-POE ROUTER									
🔔 Wi-Fi Manager						Contrator on the					
Interfaces	Interfac	e S	SID-Channel W	iFi Password	Access List	WiFi Access Points	Registration Tab	ble	Wi-Fi Manager		
155 IP 🕨											
🔯 System 🕨	1 item										
🗙 Tools 🔹 🕨	1 item										
🥎 Undo			▲ Name	Тх	Rx		Tx Packet (p/s)	Rx Packet (p/s)	FP Tx		
🎓 Redo											
Hide Passwords	D	RMB	CIS 2.4GHz-RAC	K 0 bps	0 E	ops	0	0	0 bps		

If you select the **WiFi Access points tab**, you'll be able to view the identity, MAC address and other information of the individual access points.

CIS Router Status		RouterO	S v6.47.7 (stable	e)				CIS-NW-POE ROUTER
🔍 Wi-Fi Manager		Ttoutero	C TOTAL (SUB)					
Interfaces		Interface	SSID-Channel	WiFi Password	Access List	WiFi Access Points	Registration Table	Wireless Access Points
IP	•							
💭 System	•	1 item						
🔀 Tools		1 item						
🥎 Undo			▲ Address	Ver	sion Ident	ty State	Radios	
Aredo 🔗			6C:3B:6B:EA	:36:1E 6.47	.7 Rack	Run	1	
Hide Passwords	5							

Viewing Connected Devices

Select the **Registration Table** tab to view the connected devices.

CIS Router Status	RouterO	S v6.47.7 (stable)						CIS-N	W-POE ROUT	ER 🔣	
🔍 Wi-Fi Manager											
Interfaces	Interface	SSID-Channel Wi	Fi Password	Access List	WiFi Access Points	Reg	istration Tab	ole	Wi-I	Fi Manager	
255 IP 🕨											
🔯 System 🕨	Channel So	Channel Scanner									
🔀 Tools 🔹 🕨											
🥎 Undo	1 item										
🎓 Redo		▲ Interface	SSID	MAC	Address Tx	Rate	Rx Rate	Tx Signal	Rx Signal	Uptime	
Hide Passwords	-	CIS 2.4GHz-RAC	CIS Guest		521	4bps-20	65Mbps-20	0	-66	00:02:49.24	

Changing the SSID of Managed Access Points

Select the **SSID-Channel** tab in the **Wi-Fi Manager** section. Click on the 2.4GHz network.

CIS Router Status	RouterO	S v6.47.7 (stabl	e)				Γ	CIS-NW-POE ROUTER
🔍 Wi-Fi Manager							L	
Interfaces	Interface	SSID-Channel	WiFi Password	Access List	WiFi Acces	s Points	Registration Table	Wi-Fi Manager
255 IP 🕨]							
🔯 System 🕨 🕨	2 items							
🔀 Tools 🔹 🕨	2 items							
🥎 Undo		▲ Name	SSI	D	Hide SSID	Channe	el .	
nedo		CIS 2.4GHz	Wireless CIS	Guest		2.4GHz	Channel 02	
Hide Passwords		CIS 5GHz Wi	reless CIS	5GHz Wireless		5GHz C	hannel 5180	

Enter the name of the SSID in the field. Copy and paste the SSID so that the 5GHz network has the same SSID.

RouterOS v6.47.7 (stable)	
OK Cancel Apply]
Name	CIS 2.4GHz Wireless
	CIS Guest
SSID	
Hide SSID	•

RouterOS v6.47.7 (stable)
OK Cancel Apply	
Name	CIS 5GHz Wireless
SSID	▲ CIS Guest
Hide SSID	▼

Changing the Wi-Fi Password of Managed Access Points

Select the **Wi-Fi Password** tab. Click on the network that you'd like to change the password for. If you've purchased a guest network, it will appear here.

CIS Router Status	Router	DUTEROS v6.47.7 (stable)										
🔔 Wi-Fi Manager		· · · · · · · · · · · · · · · · · · ·										
Interfaces	Interface	SSID-Channel	WiFi Password	Access List	WiFi Access Poir	nts Registration	Table	Wi-Fi Manager				
IP 🕨												
🔯 System 🕨	2 items											
🔀 Tools 🔹 🕨												
🥎 Undo		▲ Name	Authen Type	tication En	cryption F	Passphrase						
🎓 Redo		Guest	WPA2 PS	SK ae	s ccm *	ie nie nie nie nie nie nie nie						
Hide Passwords		Operations	WPA2 PS	SK ae	s ccm *	******						

Click on the network you'd like to set the password for, then enter the passphrase in the box below. It is highly recommended you use only **WPA2 PSK** for security purposes. WPA is vulnerable to password cracking.

CIS Router Status	RouterOS v6.47.7 (stable)	CIS-NW-POE ROUTER
🔔 Wi-Fi Manager		
Interfaces		Security Configuration <guest></guest>
IP System Tools	OK Cancel Apply	
🥎 Undo	Name Guest	
 Redo Hide Passwords 	WPA PSK ✓WPA2 PSK Authentication Type WPA EAP WPA PSK IS A VULERABLE PROTOCAL	
	Encryption 🔺 🗹 aes ccm	
	Passphrase CREATE A SECURE PASSWORD	

Configuring Access Points in Standalone Mode

CIS access points can be centrally managed via the Wi-Fi manager on CIS routers, or they can operate as standalone units. This section includes instructions for setting up access points as standalone units.

Setting the SSID

Select the **Wireless** tab from the left toolbar. You can view the networks under the **WiFi** interfaces tab. The 2.4 and 5 GHz bands have their own

separate networks you can modify individually. Use the 'E' and 'D' buttons to enable and disable the wireless networks.

CIS ACWAP Status	Route	rOS v	6.47.7 (stable)			CIS 2.4/	5GHz WAP			
🔍 Wireless										
Lage CIS Support	WiFi Int	terfaces	Access List	Registration	Security Profiles		Wireless Tables			
255 IP 🕨										
🔯 System 🕨	Wi-Fi M	Wi-Fi Manager Setup Repeater Scanner								
🔀 Tools 🔹 🕨										
🥎 Undo	4 items									
🎓 Redo			▲ Name	Т	pe	Actual MTU	Тх			
Hide Passwords	D	s	wlan1-2.4GHz	w	ireless (IPQ4019)	1500	0 bps			
	D	s	wlan2-5GHz	w	ireless (IPQ4019)	1500	0 bps			

Click on one of the networks, then enter your SSID in the **SSID** box. Remember to change it for both the 2.4 GHz network and 5 GHz network!

✗ Tools ►	running ap not running	slave	
Aedo	Enabled	V	
···· Hide Passwords			General
	Name	wlan1-2.4GHz	
			Wireless
	Band	2GHz-B/G/N 🗸	
	Channel Width	20MHz 🗸	
	Frequency	auto 🗸 MHz	
	SSID	CIS AP-AC 2.4	



Setting the Wi-Fi Password for Standalone Access Points

Select the **Security Profiles** tab in the Wireless section. Click on the default network to change the password and security settings.

CIS ACWAP Status	RouterOS v6.47.7 (stable) CIS 2.4/5GHz WAP								
TIS Support	WiFi Interfaces	Access List	Registration	Security Profiles	;	Wireless Table			
IP 🕨									
🔯 System 🕨	2 items								
🔀 Tools 🔹 🕨	2 items			1					
🥎 Undo		▲ Name	Mode	Authentica Types	Unicast Ciphers	Group Ciphers	WPA Pre- Shared Key		
🎓 Redo		Guest Security	dynamic keys	WPA PSK, WPA	aes ccm	aes ccm	*********		
Hide Passwords	*	default	dynamic keys	WPA2 PSK	aes ccm	aes ccm			

Enter the password in the **WPA2 Pre-Shared Key** field. CIS recommends you leave WPA PSK disabled, as it is a vulnerable protocol. If you have legacy devices that require it, enable it, and copy and paste the password into the WPA Pre-Shared Key field.

CIS ACWAP Status	RouterOS v6.47.7 (stable)	CIS 2.4/5GHz WAP
🔍 Wireless		
🏣 CIS Support		Security Profile <default></default>
255 IP ►		
🔯 System 🕨	OK Cancel Apply	
🔀 Tools 🔹 🕨		
🥎 Undo	default	
Aredo Redo		General
Hide Passwords	Name	default
	Mode	dynamic keys 🗸
	Authentication Types	WPA PSK WPA2 PSK
	Unicast Ciphers	✓aes ccm □tkip
	Group Ciphers	✓aes ccm □tkip
	WPA Pre-Shared Key	••••••
	WPA2 Pre-Shared Key	••••••
	Comment	

Enabling the Guest Network on Standalone Access Points

CIS access points running in standalone mode can run a simple guest network. To enable, click the **E** button in the **WiFi Interfaces** tab of the **Wireless** section. Enable both the 2.4 and 5 GHz networks.

CIS ACWAP Status	Route	rOS v	/6.47.7 (stable)		CIS 2.4/5	GHz WAP					
🔍 Wireless											
The CIS Support	WiFi Int	WiFi Interfaces Access List Registration Security Profiles Wireless Tables									
255 IP 🕨											
🔯 System 🕨	Wi-Fi M	Wi-Fi Manager Setup Repeater Scanner									
🔀 Tools 🔹 🕨	Tools 🕨										
🕎 Undo	4 items										
Aedo 🧑			▲ Name	Туре	Actual MTU	Тх					
- Hide Passwords	D	s	wlan1-2.4GHz	Wireless (IPQ4019)	1500	0 bps					
	D	s	wlan2-5GHz	Wireless (IPQ4019)	1500	0 bps					
	E	X	 wlan3-2.4GHz-guest 	Virtual		0 bps					
	E	х	 ♦ wlan4-5GHz-guest 	Virtual		0 bps					

Devices in the guest network will receive different IP addresses and will be isolated from clients on the main network. Change the SSID by clicking on the virtual network.

Enabled	
	General
Name	wlan3-2.4GHz-guest
Туре	Virtual
	Wireless
Secondary Channel	
SSID	▲ CIS AP-AC Guest 2.4
Master Interface	wlan1-2.4GHz
Security Profile	Guest Security

To change the password, click the **Security Profiles** tab in the Wireless menu. Click the **Guest security profile** and change the password, just like you did for the main network.

View Connected Devices

In the **Wireless** section, click the **Registration** tab to view the connected devices. You can identify them based on their MAC address. You can view the uptime, signal strength, traffic flow, and more.

CIS ACWAP Status	RouterOS v	5 47 7 (stable)								CIS 2.4/5GH	Iz WAP
💭 Wireless											
TIS Support	WiFi Interfaces	Access List	Registratio	n Security	Profiles					W	ireless Tables
255 IP 🕨				_							
🔯 System 🕨	1 item										
🔀 Tools 🔹 🕨	1 item										
🕎 Undo			мас					Last	Tx/Rx Signal		
ir Redo		▲ Radio Name	Address	Interface	Uptime	AP	w	Activity (s)	Strength (dBm)	Tx Rate	Rx Rate
- Hide Passwords	-		C6:D7:41:	wlan2-5GHz	00:00:49	no	no	11.310	-67	9Mbps	390Mbps-80MHz/

Setting up the Access Point as a Repeater

In the Wireless section, select the WiFi Interfaces tab. Click on Setup Repeater.

CIS ACWAP Status	Route	rOS	6.47.7 (stable)				CIS 2.4/50	GHz WAP			
💭 Wireless											
argent CIS Support	WiFi In	WiFi Interfaces Access List Registration Security Profiles Wireless Tables									
255 IP 🕨				_							
🔯 System 🕨	Wi-Fi M	Wi-Fi Manager Setup Repeater Scanner									
🔀 Tools 🔹 🕨											
🥎 Undo	4 items	4 items									
Aedo			▲ Name	Туре	Actual MTU	Тх	Rx	Tx Packet (p/s)			
Hide Passwords	D	s	wlan1-2.4GHz	Wireless (IPQ4019)	1500	0 bps	0 bps	0			
	D	RS	wlan2-5GHz	Wireless (IPQ4019)	1500	904 bps	0 bps	2			
	E	Х	wlan3-2.4GHz-guest	Virtual		0 bps	0 bps	0			
	Е	Х	< >> wlan4-5GHz-guest	Virtual		0 bps	0 bps	0			

Display the SSID field by clicking the down arrow next to it. Type the SSID and Passphrase of the wireless network you wish to extend the range of. Click **Start**.

Note: You can only run a repeater on one band at a time. The 2.4 GHz band will offer better range.

IP ► System	Start Stop Close
🔀 Tools 🔹 🕨	
🥎 Undo	
Aredo	Interface wlan2-5GHz
Hide Passwords	SSID CIS Guest
	Passphrase

Tools

UPnP

Universal Plug and Play enables the discovery other devices located on the network and vice-versa. If you require UPnP, select it under the **IP** tab in the toolbar, then enable it. UPnP has implications on the security of the device, and it is recommended you leave it disabled unless required.

CIS Router Status	RouterOS v6.47.7 (stable)	CIS-NW-POE ROUTER
💭 Wi-Fi Manager		
Interfaces		UPnP Settings
255 IP 🔻		
Addresses	Apply	
DHCP Client		
DHCP Server	Enabled 🗌	
DNS		
Firewall		
Hotspot		
Pool		
UPnP		
🔯 System 🕨		

Ping

Ping uses Internet Control Message Protocol (ICMP) echo messages to determine if a remote host is active. It will also provide the round-trip time between the hosts. Enter the IP address of the device and select Start to begin.

CIS Router Status	RouterOS v6.47.7 (stable)
😱 Wi-Fi Manager	
Interfaces	Pin
255 IP 🕨	
🔯 System 🕨	Start Stop Close
🗙 Tools 🛛 🔻	
IP Scan	
Platinum Monitoring	
Ping	Genera
Torch	Ping To 0.0.0.0 V
Traceroute	Enter Specific IP of Device
🥎 Undo	Timeout 1000 ms
🥐 Redo	
- Hide Passwords	Advanced
	Packet Size 50
	# Seq # Host Time Reply Size TTL Status

IP Scan

The IP scan tool locates devices on the network. It can also locate devices that have a static IP set internally if they are on the same network as your access point.

To use the IP scan tool, select the network you wish to scan on (bridge-operations is default), then enter the network address and subnet mask using CIDR notation.

CIS Router Status	RouterOS v6.47.7 (stable)			CI	CIS-NW-POE ROUTER		
💭 Wi-Fi Manager	ito deciro o tornir (
Interfaces							IP Scan
IP 🕨							
🔯 System 🕨	Start Stop Close						
🔀 Tools 🛛 🔻							
IP Scan	Interface	bridge-op	erations 🗸				
Platinum Monitoring	Select Bridge Interface						
Ping	10.100.1.0/24						
Torch	Address Range Enter Network Address and Subnet Mask						
Traceroute		1					
🥎 Undo	#	Address	MAC Address	Time (ms)	DNS	SNMP	Netbios
🎓 Redo							

Select **bridge-operations** and enter **10.100.1.0/24** as the address range. You may have multiple interfaces and address ranges depending on your configuration. Most use a /24 network size.

Wireless Scanner

You can use the access point to scan for other wireless networks in the area. This is immensely helpful if you need to discover networks that may be interfering with your wireless performance.

Note: You must disable the Wi-Fi manager on the access point prior to using this tool!

From the **Wireless** section, click on the **Scanner** button. Select the interface to use and click **Start**.

CIS ACWAP Status	RouterOS v6.47.7 (stable)	CIS 2.4/5GHz WAP
🔍 Wireless		
argent CIS Support	WiFi Interfaces Access List Registration Security Profiles	Wireless Tables
255 IP 🕨		
🔯 System 🕨	Wi-Fi Manager Setup Repeater Scanner	
🔀 Tools 🔹 🕨		
CIS ACWAP Status	RouterOS v6.47.7 (stable)	CIS 2.4/5GHz WAP
Wireless		

CIS ACWAP Status	RouterOS v6.47.7 (stable) CIS 2.4/50	GHz WAP
🔍 Wireless		
🏣 CIS Support		Scanner
IP 🕨		
🔯 System 🕨	Start Stop Close	
🔀 Tools 🔹 🕨		
🥎 Undo	Interface wlan1-2.4GHz 🗸	

Troubleshooting

Symptom	Possible causes
The devices are having trouble maintaining a connection to the wireless network.	 Check the signal strength in the registration table. A healthy signal range is between -30 and -75 dB. Avoid using the 2.4 GHz network when possible, as it is more prone to interference. Use the Scanner tool to detect interfering networks if necessary. Try changing the channel of the access points. You can do this in the Wi-Fi manager by clicking on the Interface tab, then choose an access point radio. Click the down arrow to show the channel box.
The device won't connect to the wireless network at all.	 Ensure the device is in range of the access point.
	• Temporarily disable all access points except the one closest to the device. Some devices have issues with multiple access points with the same SSID.
	 If this is the case, contact CIS and we will make a separate SSID for these devices that is only broadcast on one access point.
	 802.11b is disabled by default. If you have devices that require 802.11b you can enable it in the Wi-Fi manager or contact CIS for assistance.
	• Ensure that the passphrase is correct.
I am not receiving the speed that I am expecting.	 The CIS-WAPXL has been tested to achieve approximately 375 mbps in our testing.
	• The vast majority of access points and client devices will not provide or support the full throughput of a 1 Gbps internet connection.
	 Test the speed of your device when it is plugged into the wired network if possible. Compare the results.

The speed is particularly slow.	 Ensure there is adequate coverage throughout the building. We recommend one access point for every 			
	1000 sq ft for adequate 5 GHz coverage.The placement of the access point can have a			
	significant impact of the nearby material	on performance as well as ls. The following materials th reflecting or absorbing		
	Type of Barrier Interf			
	Wood	Low		
	Synthetic material	Low		
	Glass	Low		
	Water	Medium		
	Bricks	Medium		
	Marble	Medium		
	Plaster	High		
	Concrete	High		
	Bulletproof glass	High		
	Metal	Very high		
	affect Wi-Fi performand Microwave ove Power sources Cordless home Wireless video Wireless speake Poorly shielded	ns. – breaker boxes, etc. phones. transmitters. ers. d cabling.		
The access point will not turn on.	 Most issues occur when the access point is used with PoE. Ensure the router or switch is capable of providing PoE. Some devices only support PoE on specific ports. Faulty cabling or bad terminations can cause issues with PoE. Try plugging the access point directly into the router or switch with a short cable. CIS routers and switches provide more stable PoE when the port is set to "Forced On". Review the user manuals for instructions. 			

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



CIS Access Points are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC.