Configure Guest Network using Email Authentication and RADIUS Accounting in Cisco Business Wireless Access Point

Objective

The objective of this document is to show you how to configure a guest network using email authentication and RADIUS accounting in Cisco Business Wireless (CBW) Access Point (AP).

Applicable Devices | Software Version

- 140AC (Data Sheet) | 10.0.1.0 (Download latest)
- 145AC (Data Sheet) | 10.0.1.0 (Download latest)
- 240AC (Data Sheet) | 10.0.1.0 (Download latest)

Introduction

The CBW APs support the latest 802.11ac Wave 2 standard for higher performance, greater access, and higher-density networks. They deliver industry-leading performance with highly secure and reliable wireless connections, for a robust, mobile end-user experience.

Remote Authentication Dial-In User Service (RADIUS) is an authentication mechanism for devices to connect and use a network service. It is used for centralized authentication, authorization, and accounting purposes.

Usually a RADIUS server regulates access to the network by verifying the identity of the users through the login credentials entered that includes a username and password. When a guest network is configured using email address authentication, the email id that is used is sent to the RADIUS Accounting Server and stored for future use such as sending marketing information.

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Configure RADIUS on your CBW AP

For steps to configure RADIUS, refer to the article on <u>Configure RADIUS in Cisco Business</u> <u>Wireless Access Point</u>.

Guest network configuration

To set up a guest wireless network to use email address authentication, do the following:

Login to your CBW AP using a valid username and password.

cisco Business

Cisco Business Wireless Access Point

Welcome! Please click the login button to enter your user name and password



Step 2

To configure a guest network, navigate to Wireless Settings > WLANs.



Step 3

Click on Add new WLAN/RLAN.

WLANs						
Active WLA	Ns 2	📥 Active RLA	Ns 1			
Add new WLAN/RLA	N					
Action Active		Туре	Name	SSID	Security Policy	Radio Policy

Step 4

In the pop-up window, under *General* tab, enter the *Profile Name*. The *SSID* field will auto populate. Slide the **Enable** option and click **Apply**.

Add new WLAN/RLAN			×
General WLAN Security V	LAN & Firewall	Traffic Shaping	Scheduling
WLAN ID	2	¥	
Туре	WLAN	•	
Profile Name *	GuestEmail	2	
SSID * WLA	GuestEmail Ns with same SSID	3 can be configured,	unless
Enable		s are different.	
Radio Policy	ALL	•	
Broadcast SSID			
Local Profiling	0		
			(Cancel

Step 5

Navigate to *WLAN Security* tab and enable *Guest Network*. From the *Access Type* drop-down menu, choose **Email Address**. Click **Apply**.

Add new WLAN/RLAN	×
General WLAN Security VLAN & Firewall Traffic Shaping Scheduling	
Guest Network 2 Captive Network Assistant	
MAC Filtering	
Captive Portal Internal Splash Page •	
Access Type Email Address	
ACL Name(IPv4) None v	
ACL Name(IPv6) None v	
	4
	O Apply (Cancel

Monitoring

When a user enters their email address in the guest network for authentication, the client

information can be viewed in the web User Interface (UI) of the AP.

To do this, navigate to **Monitoring > Guest Clients** in the web UI of the AP.



Details of the guest clients including email addresses can be viewed.

Suest Clients						
Guest Clients Recent Clients	Total	1 1	2.4GHz 5GHz		Wireless	0 1
User Name 🔻 🗸 🗸 🗸 🗸 V	IPv4 Address 🗸 🗸	AP Name 🗸	Protocol ~	Connecti ~ Speed	Mac Address 🗸	
are pm	172.16.1.228	APA453.0E22.0A70	802.11ac	173 Mbps	98 ie	

You can view the guest email information as long as the guest user is connected. Once the user disconnects, the information will not be available under guest clients menu of the AP.

Tracking using Radius Accounting Server

The guest email address will be sent to the Radius Accounting Server with server index 1. Hence the guest information can be tracked even after the client disconnects from the guest network. This facilitates tracking and collection of email addresses of the customers.

SQLO	Juery 1 sel	.sql - DCadministrator (ect = from dbo.acco	61))* + × Obj unting_data	ect Explorer Det	ails						+
											¥
100 9	6 ·										
ш	id	S I III Messages timestamp	Computer Name	Packet Type	User Name	F Q User Name	Called Station Id	Calling Station Id	Callback Number	Framed IP Address	N/
1	1	2020-05-18 15:30:03.213	DC1	4	admin	NULL	NULL	NULL	NULL	NULL	N
2	2	2020-05-18 15:30:07.537	DC1	4	cW140-a4530e220a70	NULL	172.16.1.50	0.0.0.0	NULL	NULL	С
3	3	2020-05-18 15:32:45.507	DC1	4	cW140-68cae4700500	NULL	172.16.1.50	0.0.0.0	NULL	NULL	С
4	4	2020-05-18 16:13:59.467	DC1	1	test	CISCOTEST\test	172.16.1.50	00:11:22:33:44:55	NULL	NULL	С
5	5	2020-05-18 16:13:59.467	DC1	3	NULL	CISCOTEST\test	NULL	NULL	NULL	NULL	N
6	6	2020-05-18 16:14:05.813	DC1	1	test	Cisco Test Local/Test Users/test	172.16.1.50	00:11:22:33:44:55	NULL	NULL	С
7	7	2020-05-18 16:14:05.827	DC1	2	HOLL	Cisco Test.Local/Test Users/test	NULL	NULL	NULL	NULL	N
	0	2020-05-18 16:17:22 120	DC1		34 000	ALL I	172 16 1 50	172 16 1 228	NULL	172 16 1 228	C

The Radius Accounting data shown above is on a Windows Server using a SQL Database.

Conclusion

There you have it! You have now learned the steps to configure a guest network using email authentication and RADIUS accounting on your CBW AP. For more advanced configurations, refer to the *Cisco Business Wireless Access Point Administration Guide*.