Configure Remote LAN (RLAN) on Access Point Catalyst 9124

Contents

Introduction
<u>Prerequisites</u>
Requirements
Components Used
Background
Configure
Network Diagram
Configurations
AAA Configuration
RLAN Configuration
FlexConnect Local Switching RLAN
Verify
Central Switching
Flex-Connect Local Switching

Introduction

This document describes how to configure Remote Local Area Network (RLAN) on AP Catalyst 9124 model using WLC model 9800.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- 9800 WLC
- Command-line Interface (CLI) access to the wireless controllers and Access Points.

Components Used

The information in this document is based on these software and hardware versions:

- Catalyst 9800-L WLC version 17.09.05
- C9124 Series AP

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background

A Remote LAN (RLAN) is used for authenticating wired clients using the controller. Once the wired client successfully joins the controller, the LAN ports switch the traffic between central or local switching modes. The traffic from the wired clients is treated as wireless client traffic. The RLAN in Access Point (AP) sends the authentication request to authenticate the wired client. The authentication of the wired clients in RLAN is similar to the central authenticated wireless client.

For more detailed information about RLAN, please visit the <u>Cisco Catalyst 9800 Series Wireless Controller</u> <u>Software Configuration Guide</u>.

RLAN is supported in APs that have more than one Ethernet port and AP model 9124 contains 2 Ethernet ports named GigabitEthernet0 and LAN1, labeled as 2 and 3 respectively in the picture:



9124 Ethernet ports

Complete HW details please read the <u>Cisco Catalyst 9124AX Series Outdoor Access Point Hardware</u> <u>Installation Guide</u>.

Configure

This document assumes that the AP is already joined to the WLC.

If you need guidance on joining AP 9124 to WLC, please read this guide: <u>Configure Mesh on Catalyst 9800</u> <u>Wireless LAN Controllers</u>.

AP supports RLAN both on Local Mode and Flex Mode. If you need RLAN traffic to be locally switched, the AP mode must be Flex and configure the RLAN Profile accordingly.

Note: If you set AP as Flex+Bridge mode, the AP logs a message like: "*RLAN_CFG: enable_LAN_port Cannot enable LAN[0]: ClickPort 66: Feature not supported on Mesh*".

Network Diagram



Topology

Configurations

AAA Configuration

1. In this document, the security method for the RLAN is MAC filtering, therefore you need to configure AAA in advance. You can have the mac addresses in a remote AAA server or locally on the WLC.

Here the local WLC database is used. Add the mac address of the client **without any delimeters**, that is expected to connect to the RLAN to the **Device Authentication** list:

Cisco Cisco C	Catalyst 9800-L Wireless Controller		Welcome admin	***
Q Search Menu Items	Configuration * > Security * > AA	A		
Dashboard	+ AAA Wizard			
Monitoring	> Servers / Groups AAAA Metriod L			
	Global Config	MAC Address Serial Number		
O Administration	RADIUS Fallback	+ Ouick Setup: MAC Eiltering		The second secon
C Licensing	Attribute List Name	Quick Setup. MAC Filtening		
* Troubleshooting	AP Policy	MAC Address*	43beeb3af	dio
	Password Policy	Attribute List Name	N Client	th
	AAA Interface	WLAN Profile Name Sele	ect a value	h
		D Cancel		/ to Device

Device Management Local DB

2. Configure the Authorization method to use the local database. Here named RLAN_macF:

Cisco Cisco Cata	alyst 9800-L Wireless Controller			Welcon	ne admin 🛛 👫 🐔 🗛 🖻	Search APs and Clients Q	Feedback y ^A
Q Search Menu Items	Configuration * > Security * > AAA				Quick Setup: AAA Authoriz	zation	×
Dashboard	+ AAA Wizard				Method List Name*	RLAN_macF	
<u></u>	Servers / Groups AAA Method Lis	AAA Advanced			Type*	network v	
Monitoring >					Group Type	local v	
🔾 Configuration 💦 💡	Authentication	+ Add × Delete			Authenticated	0	
Co tabulatantan .	Authorization				Available Server Groups	Assigned Server Groups	
203 Administration	Accounting	Name	т Туре	T Group Type	radius		_
C Licensing		default	network	local	Idap tochce		×
*		sc-client	network	local	radius_ise	<	
K Troubleshooting		Autho_IOT	network	group		>	
		RLAN_macF	network	local	•	· · · · ·	¥.
		A			1		

RLAN Configuration

1. In order to create **RLAN Profile**, navigate to **Configuration** > **Wireless** > **Remote LAN** and enter a **Profile Name** and **RLAN ID** for the **RLANProfile**, as shown in this image.

Cisco Cat	talyst 9800-L Wireless Controller	Welcome admin	Search APs and Cleris Q
Q, Search Menu Items	Configuration * > Tags & Profiles * > Remote LAN	Edit RLAN Profile	×
- Doubbourd	RLAN Profile RLAN Policy	General Security	
Dashboard	+ Add 🛛 Zelete 🖹 Clone Enable RLAN Profile Disable	Profile Name*	9124RLANProf
Monitoring >		RLAN ID*	1
Configuration	Selected RLAN Profiles : 0	Status	ENABLED
(i) Administration	Status T Name 9124RLANProf	Client Association Limit	0
C Licensing	H 4 1 H 10 V	mDNS Mode	Bridging
* Troubleshooting			
		Dissed	m
		- Cancel	Device

RLAN Profile General

2. Navigate to **Security.** In this example, the security method used is **MAC Filtering.** Go to **Layer 2**, leave **802.1x** to **Disabled** and select the Authorization method for **MAC Filtering**, as shown in this image.

Cisco Cisco Ca	alyst 9800-L Wireless Controller	Welcome admin 🛛 🙀 🐔	A B & B O S Search APs and Clerits Q
Q. Search Menu Items	Configuration * > Tags & Profiles * > Remote LAN	Edit RLAN Profile	×
Dashboard	RLAN Profile RLAN Policy	General Security Layer2 Layer3 AAA	
Monitoring ,	+ Add X Delete Cione Enable RLAN Profile Disable RLAN Profile	802.1x	DISABLED
Configuration	Selected RLAN Profiles : 0	MAC Filtering	RLAN_macF
Administration	Status T Name	Authoritication List	Not Configured
-	9124RLANProf	Page 10 control cont	
C Licensing	H 4 1 > H 10 +	Fallback Mechanism	No Fallback
X Troubleshooting		EAP-Identity-Request Retries Status	DISABLED
		EAP-Request Retries Status	DISABLED

RLAN Security

3. Create the RLAN Policy. Navigate to **Configuration** > **Wireless** > **Remote LAN** and on the **Remote LAN** page, click **RLAN Policy** tab, as shown in this image.



RLAN Policy

In this setup, all traffic is **Centrally Switched** at the WLC.

4. Navigate to Access Policies and configure the VLAN and Host Mode and apply the settings.

Cisco Cata	lyst 9800-L Wireless Controller		Welcome admin	• • • • • • •	Search APs and Clients Q	•
O Search Menu Items	Configuration * > Tags & Profiles * > Remote LAN		Edit RLAN Policy			×
- Deathard	RLAN Profile RLAN Policy		General Access Policies Adva	anced		
Monitoring	+ Add X Delete		Pre-Authentication	VLAN0100 • 0	Host Mode singlehost •	
2	Name	▼ Status		Clear		
Configuration >	9124RLANPolicy	<	Remote LAN ACL			
Administration	H 4 1 > H 10 ¥		IPv4 ACL	Not Configured 👻 💈		
C Licensing			IPv6 ACL	Not Configured 👻 💈		

RLAN Policy Access Policies

5. Create a **PolicyTag** and map **RLAN Profile** to **RLAN Policy.** Navigate to **Configuration** > **Tags & Profiles** > **Tags.**

Edit Policy Tag					:
Name*	9124RLANPolTag				
Description	Enter Description				
V WLAN-POLICY	Maps: 0				
+ Add × Delet	te				
WLAN Profile		T	Policy Profile		T
⊲ ⊲ 0 ⊳ ⊳	10 🔻			1	No items to display
RLAN-POLICY + Add × Delet	Maps: 1				
Port ID	T	RLAN Profile	T	RLAN Policy Profile	T
□ 1		9124RLANProf		9124RLANPolicy	
∺ 1 ► ∺	10 🔻				1 - 1 of 1 items
Map RLAN and Polic	у				
RLAN Profile*	9124RLANProf	▼ Ø ×	RLAN Policy Profile*	9124RLANPolicy	

Policy Tag

6. We must apply the **Policy Tag** to the AP and **Enable** the **LAN** port. Navigate to **Configuration** > **Wireless** > **Access Points** and click on the AP.

Cisco Catalyst 9800-L Wireless Controller							Welcome admin	* * 4 * *	Search APs and Cle	The Contract of the second sec
O. Search Mercu Items	Configuration * > Wireless * > Access Points									×
of neuron meno meno							General Interfaces	High Availability Inve	ntory ICap Advanced	Support Bundle
Dashboard	 All Access Points 						General		Tags	
Monitoring ,	Total APs : 1						AP Name*	AP9124_01	Policy	9124RLANPolTag
🖏 Configuration	AP Name	AP Model	; Slots	Admin : Status	Up Time : IP A	lddress	Location*	WGB_LA8_Test	Site	Search or Select 9124RLANPolTag
(Administration ,	AP9124_01 4	C9124AXI-B	2	0	0 days 1 hrs 26 mins 30 secs 192	.168.100.5	Base Radio MAC	4ca6.4d23.aee0	RF	default-policy-tag
C Licensing	к н к 1 р н	10 -					Ethernet MAC	3c57.31c5.ac2c	Write Tag Config to AP	PLG_SC_POLICY

Policy Tag on AP configuration

Apply the setting and the AP re-joins the WLC. Click on the AP, then select **Interfaces** and enable the **LAN** port in the **LAN Port Settings.**

General	Interfac	ces H	igh Availal	oility Ir	nventory	ICa	ар	Advanced	S	upport	Bundle	
Etherne	t Interface	s										
Interface	Ţ	Operation	Status	Speed	T Rx I	Packets	T	Tx Packets	Ŧ	Discare	ded Packets	T
GigabitEth	ernet0	G)	1000 Mbps	220	65		12905		0		
GigabitEth	ernet1	C)	Auto	0			0		0		
LAN1		C		Auto	116	82		156		0		
н ч	1 ►	▶ 10	•								1 - 3 of 3 it	ems
Radio Ir	nterfaces											
					-				Spect	rum		
Slot Y No	Interface	T	Band Y	Admin Status	Y Op Sta	eration tus	Spect Admin	n Status	Opera Status	ition 8	Regulatory Domain	T
Slot Y No	Interface 802.11ax	▼ - 2.4 GHz	Band Y	Admin Status Enabled	▼ Op Sta	eration tus	Spect Admin	n Status	Opera Status	ition	Regulatory Domain -A	T
Slot ▼ No 0 1 1	Interface 802.11ax 802.11ax	▼ - 2.4 GHz - 5 GHz	Band T	Admin Status Enabled Enabled	Y Op Sta	eration tus O	Spect Admin Enable Enable	ed ed	Opera Status	ition	Regulatory Domain -A -B	T
Slot ▼ No 0 1 I	Interface 802.11ax 802.11ax 1	▼ - 2.4 GHz - 5 GHz	Band T	Admin Status Enabled Enabled	Y Op Sta	eration tus O	Spect Admin Enable Enable	ed	Opera	ation C C	Regulatory Domain -A -B 1 - 2 of 2 it	▼ ems
No No 1 Power (Interface 802.11ax 802.11ax 1		Band T All All D T	Admin Status Enabled Enabled	Y Op Sta	LAN Po	Spect Admin Enable Enable	tings	Opera Status		Regulatory Domain -A -B 1 - 2 of 2 it	ems
Slot ▼ No 0 1 I I I Power (Power ()	Interface 802.11ax 802.11ax 1 Nover Ethern	▼ - 2.4 GHz - 5 GHz ■ 10 net Setting	Band T All All D T PoE/N	Admin Status Enabled Enabled	Y Op Sta	LAN Po	Spect Admin Enable Enable	tings	Opera Status	PoE	Regulatory Domain -A -B 1 - 2 of 2 it	ems
Slot ▼ No 0 1 I I I <td< td=""><td>Interface 802.11ax 802.11ax 1 Nover Ethern</td><td>Y - 2.4 GHz - 5 GHz N N 10</td><td>Band T All All B B B B All B B B B B B B B B B</td><td>Admin Status Enabled Enabled</td><td>Y Op Sta</td><td>An Antiperiod Content of the second second</td><td>Spect Admin Enable Enable</td><td>tings</td><td>Opera Status</td><td>PoE</td><td>Regulatory Domain -A -B 1 - 2 of 2 it Power Level</td><td>ems RLAN</td></td<>	Interface 802.11ax 802.11ax 1 Nover Ethern	Y - 2.4 GHz - 5 GHz N N 10	Band T All All B B B B All B B B B B B B B B B	Admin Status Enabled Enabled	Y Op Sta	An Antiperiod Content of the second	Spect Admin Enable Enable	tings	Opera Status	PoE	Regulatory Domain -A -B 1 - 2 of 2 it Power Level	ems RLAN
Slot Y No 0 1 Power (Power (Power Ty PoE Pre- Switch	Interface 802.11ax 802.11ax 1 Nover Ethern ype/Mode -Standard	▼ - 2.4 GHz - 5 GHz M 10	Band Y All All Poet/N Powe Disab	Admin Status Enabled Enabled Medium r (25.5 W)	Y Op Sta	LAN Po	Spect Admin Enable Enable T Sta	tings	Opera Status	PoE	Regulatory Domain -A -B 1 - 2 of 2 it Power Level NA T 1 - 1 c	RLAN

AP LAN1 port settings

Apply the settings and verify the status. Make sure the RLAN shows Green.

FlexConnect Local Switching RLAN

If you need **RLAN** traffic to be locally switched, the AP mode must be **Flex** and configure the **RLAN Profile** accordingly.

Note: If you set AP as **Flex+Bridge** mode, the AP logs a message like: "*RLAN_CFG: enable_LAN_port Cannot enable LAN[0]: ClickPort 66: Feature not supported on Mesh*".

1. Start by the **Flex Profile** configuration to be applied to the **Site Tag**. Ensure to configure the correct native **VLAN** and push the correct client **VLAN**(s) to the Flex AP.

Cisco Cata	lyst 9800-L Wireless Controller	Welcome admin	e) 🖌 🕪
Q Search Menu Items	Configuration * > Tags & Profiles * > Flex	Edit Flex Profile	×
Dashboard	+ Add X Delete	General Local Authentication Policy ACL VLAN DNS Layer Security	
	Flex Profile Name	+ Add × Delete	
Monitoring >	LWA_Flex_P	VLAN Name Y ID Y Ingress ACL Y Egress ACL Y	
	9124FlexProfile	ULAN0100 100	
- Company	default-flex-profile	VLAN0101 101	
Administration	H 4 1 > H 10 •	H < 1 > H 10 • 1 - 2 of 2 items	

2. To change the AP 9124 to **FlexConnect** mode, you need to disable the option "**Enable Local Site**" in the **Site Tag** configuration. After that, the option to select the **Flex Profile** appears. Select the **Flex Profile** configured previously:

Cisco Cata	alyst 9800-L Wireless Controller	Welcome admin 🛛 🌴 🜾 🛕 🖹 🌣 🔞 🕢 Z Seech APs and Cleres Q
Q. Search Menu Items	Configuration * > Tags & Profiles * > Tags	Edit Site Tag *
Dashbaard	Policy Site RF AP	▲ Changing Site type may result in rejoin of APs that are associated to this Site Tag
Monitoring	+ Add × Delete Chone Reset APs	Name* Mesh_AP_Teg
Configuration	Site Tag Name	Description Enter Description
Administration	Mesh_AP_Tag LWA_testSiteTag	AP Join Profile Mesh_AP_Join_P
C Licensing	default-site-tag	Flex Profile 9124/HexProfile E Fabric Control Plane Name C
💥 Troubleshooting		Enable Local Site
		Load* ()
		I construction of the second se

Site Tag Disable Local Site

Once you click on Update and Apply to Device, the AP console logs:

[*08/29/2024	08:25:13.2976]	Previous AP mode is 0, change to 2
[*88/29/2824	08:25:13.3213]	DOT11_CFG[0] Radio Mode is changed from Local to FlexConnect
[*88/29/2824	08:25:13.3219]	DOT11_DRV[0]: Stop Radio0 - Begin
[*08/29/2024	08:25:13.3237]	<pre>wlan: [0:I:CMN_MLME] mlme_ext_vap_down: VAP (mon0) is down</pre>
[*08/29/2024	08:25:13.3262]	DOT11_DRV[0]: Stop Radio0 - End
[*08/29/2024	08:25:13.3263]	DOT11_CFG[0]: Starting radio 0
[*88/29/2824	08:25:13.3268]	DOT11_DRV[0]: Start Radio0 - Begin
[*08/29/2024	08:25:13.3434]	DOT11_DRV[0]: Start Radio0 - End
[*08/29/2024	08:25:13.3522]	<pre>wlan: [0:I:CMN_MLME] mlme_ext_vap_up: VAP (mon0) is up</pre>
[*08/29/2024	08:25:13.3756]	DOT11_CFG[1] Radio Mode is changed from Local to FlexConnect
[*08/29/2024	08:25:13.3920]	DOT11_DRV[1]: Stop Radio1 - Begin
[*08/29/2024	08:25:13.3940]	<pre>wlan: [0:I:CMN_MLME] mlme_ext_vap_down: VAP (mon1) is down</pre>
[*08/29/2024	08:25:13.3963]	DOT11_DRV[1]: Stop Radio1 - End
[*08/29/2024	08:25:13.3964]	DOT11_CFG[1]: Starting radio 1
[*08/29/2024	08:25:13.3969]	DOT11_DRV[1]: Start Radio1 - Begin
[*08/29/2024	08:25:13.3980]	DOT11_DRV[1]: Start Radio1 - End
[*08/29/2024	08:25:13.4143]	<pre>wlan: [0:I:CMN_MLME] mlme_ext_vap_up: VAP (mon1) is up</pre>

AP mode change Local to Flex

And the AP now shows **Flex** as **AP Mode**:

Cisco Cisco Cata	alyst 9800-L Wirel	ess Con	troller						Nelcome admin	#	▲ 7	8	• • •	C Search	APs and Clients Q	Feedback	20
Q. Search Menu Items	Configuration * >	Wireless *	> Access Pol	ints													
Dashboard	✓ All Access	Points												Manufacture of ADa			
Monitoring ,	Total APs : 1											Tag :	0 Coun	try Code : 0	LSC Fallback : 0	Select an Action	ð 🔻
	AP Name	:	AP Model	:	Slots	Admin : Status	Up Time	IP Address	Base Radio MAC	: Et	thernet MAC	:	AP Mode	Power Derate Capable	: Operation : Status	Configuration : Status	Countr
Administration	AP9124_01	414	C9124AXI-B		2	۲	0 days 0 hrs 17 mins 53 secs	192.168.100.11	4ca6.4d23.aee0	30	c57.31c5.ac2d		Flex	No	Registered	Healthy	No
C Licensing	< ∞ < 1 >	н	10 🔻													1 - 1 of 1 access poin	, ts O

Note: When we move the AP from Local to Flex mode, the AP does NOT reload, however when we move

from Flex to Local mode, the AP reloads.

3. Go to **Configuration > Tags & Profiles > Remote LAN > RLAN Policy** and edit the **RLAN Switching Policy** for Local Switching. Disable **Central Switching** and **Central DHCP**:

Cisco Cisco Ca	talyst 9800-L Wireless Controller		Welcome ad	imin 🖌 希 🗛 🖹 🌩 🕅	Bearch APs and Clients	Q				
Q. Search Menu Items	Configuration * > Tags & Profiles * > Remote LAN	Edit RLAN Policy *								
Dashbaard	RLAN Profile RLAN Policy		General Access Policies Advanced							
	+ Add X Delete		A (ith this policy.						
Configuration	Name 9124RI ANPolicy	▼ Status	Policy Name*	9124RLANPolicy	RLAN Switching Policy					
Administration	R 4 1 9 R 10 +		Description	Enter Description	Central Switching	DISABLED				
C Licensing			Status	ENABLED	Central DHCP	DISABLED				
Y Troubleshooting			PoE	0						
			Power Level	4						

RLAN Policy Local Switching

Verify

Central Switching

Connect a PC in the LAN1 port of the AP. PC authenticates via MAB and gets an IP address from the configured VLAN.

Navigate to Monitoring >Wireless > Clients to check the client status.

Cisco Catalyst 9800-L Wireless Cor	troller		Welcome admin 🔗 🐔 🛕	🖹 🌣 🕲 🕢 🎗 Search APs and O	ients Q				
Q. Search Menu Items Monitoring * > Wireless * >	Clients		Client						
Clients Sleeping Clients	Excluded Clients	360 View General QOS Statistics	ATF Statistics Mobility History	Call Statistics					
Dashboard		Client Properties AP Properties S	Security Information Client Statistics	QOS Properties EoGRE					
Monitoring → X Delets 2		MAC Address 18e4.3bee.53af							
Selected 0 out of 1 Clients		Client MAC Type Client DUID							
Client MAC Address	▼ IPv4 Address ▼ IPv6 Address	AP Name Y SSID	IPV4 Address	192.168.100.12					
Administration > 10 f8e4.3bee.53af		AP9124_01 91	IPV6 Address User Name						
C Licensing	10 🗸		Policy Profile	9124RLANPolicy					
₩ Troubleshooting		Flex Profile N/A Remote LAN Id 1							
			Remote LAN Name	9124RLANProf					
			Wireless LAN Network Name (SSID) BSSID	9124RLANProf 4ra6 4rd23 app0					
			Uptime(sec)	9 seconds					
			Port ID	1					
			Idle state timeout	N/A					

Client details

From the AP CLI you can view the port status change and client details:

```
AP9124_01#debug client F8:E4:3B:EE:53:AF

AP9124_01#debug rlan

critical Enable RLAN critical level debugging

errors Enable RLAN error level debugging

events Enable RLAN event level debugging

info Enable RLAN info level debugging

AP9124_01#show wired clients

Total wired clients: 1

mac port state local_client detect_ago associated_ago tx_pkts tx_bytes rx_pkts rx_bytes
```

```
AP9124_01#debug rlan info
AP9124 01#debug rlan eve
AP9124 01#debug client F8:E4:3B:EE:53:AF
AP9124_01#[*08/29/2024 08:51:12.7861] chatter: wiredif_mapper :: WiredIfMapper - Invalid Port 2 State 1
[*08/29/2024 08:51:12.7861] chatter: Device wired2 notify state change link UP
[*08/29/2024 08:51:13.3611] RLAN_EVENT-RlanPortControl: LAN-Port[0] UP Event
[*08/29/2024 08:51:16.8306] RLAN_EVENT-RlanPortControl: LAN-Port[0] Detect client F8:E4:38:EE:53:AF
[*08/29/2024 08:51:16.8307] RLAN_EVENT-RlanPortControl: LAN-Port[0] send_assoc for client F8:E4:38:EE:53:AF
[*08/29/2024 08:51:16.8308] CLSM[F8:E4:3B:EE:53:AF]: US Assoc Req(0) IF 5 slot 16 port_id 0 vap_id 0 Len 52 client state UNASSOC
[*08/29/2024 08:51:16.8309] CLSM[F8:E4:3B:EE:53:AF]: client moved from UNASSOC to ASSOC
[*08/29/2024 08:51:16.8341] CLSM[F8:E4:38:EE:53:AF]: DS Assoc Resp(10) IF 87 slot 16 vap 0 state ASSOC
[*08/29/2024 08:51:16.8372] CLSM[F8:E4:3B:EE:53:AF]: Added to ClientIPTable on wired2
[*08/29/2024 08:51:16.8375] RLAN_CFG: rlan_add_client client F8:E4:38:EE:53:AF, port 0 vlan: 0
[*08/29/2024 08:51:16.8377] CLSM[F8:E4:3B:EE:53:AF]: Add RLAN client succeeded in vap 0
[*08/29/2024 08:51:16.8378] CLSM[F8:E4:3B:EE:53:AF]: client moved from ASSOC to FWD
[*08/29/2024 08:51:16.8379] CLSM[F8:E4:3B:EE:53:AF]: Added to WCP client table AID 0 Radio 16 Vap 0
[*08/29/2024 08:51:16.8381] CLSM[F8:E4:3B:EE:53:AF]: Decoding TLV_CLIENTCAPABILITYPAYLOAD: capbaility: 0 Apple Client: No
0000 0000000 0000000 0000000 0000000
[*08/29/2024 08:51:19.6631] chatter: ethertype_cl1: 1724921479.663102627: arp who-has 169.254.233.120 tell 0.0.0.0
[*08/29/2024 08:51:20.6609] chatter: ethertype_cl1: 1724921480.660846272: arp who-has 169.254.233.120 tell 0.0.0.0
[*08/29/2024 08:51:21.1727] chatter: dhcp_from_inet: 1724921481.172667939: 0.0.0.0.68 > 255.255.255.255.67: udp 309
[*08/29/2024 08:51:21.1746] chatter: dhcp_reply_nonat: 1724921481.174640751: 192.168.101.1.67 > 192.168.101.11.68: udp 308
[*08/29/2024 08:51:21.2150] chatter: ethertype_cl1: 1724921481.215028303: arp who-has 192.168.101.1 tell 192.168.101.1
[*08/29/2024 08:51:21.5063] chatter: ethertype_cll: 1724921481.506300855: arp who-has 192.168.101.1 tell 192.168.101.11
[*08/29/2024 08:51:21.6544] chatter: ethertype_cl1: 1724921481.654387730: arp who-has 192.168.101.11 tell 0.0.0.0
[*08/29/2024 08:51:22.6518] chatter: ethertype_c11: 1724921482.651782313: arp who-has 192.168.101.11 tell 0.0.0.0
0000 0000000 0000000 0000000 0000000
[*08/29/2024 08:51:23.6552] chatter: ethertype cl1: 1724921483.655126375: arp who-has 192.168.101.11 tell 0.0.0.0
[*08/29/2024 08:51:24.6645] chatter: ethertype_cll: 1724921484.664425489: arp who-has 192.168.101.11 tell 192.168.101.11
```

Flex-Connect Local Switching

AP9124 01#[*08/28/2024 14:16:30.7138] chatter: wiredif mapper :: WiredIfMapper - Invalid Port 2 State 1 [*08/28/2024 14:16:30.7138] chatter: Device wired2 notify state change link UP [*08/28/2024 14:16:30.9659] RLAN_EVENT-RlanPortControl: LAN-Port[0] UP Event [*08/28/2024 14:16:33.2574] RLAN_EVENT-RlanPortControl: LAN-Port[0] Detect client F8:E4:3B:EE:53:AF [*08/28/2024 14:16:33.2574] RLAN_EVENT-RlanPortControl: LAN-Port[0] send_assoc for client F8:E4:3B:EE:53:AF [*08/28/2024 14:16:33.2576] CLSM[F8:E4:3B:EE:53:AF]: US Assoc Req(0) IF 5 slot 16 port_id 0 vap_id 0 Len 52 client state UNASSOC [*08/28/2024 14:16:33.2576] CLSM[F8:E4:3B:EE:53:AF]: client moved from UNASSOC to ASSOC [*08/28/2024 14:16:33.2619] CLSM[F8:E4:3B:EE:53:AF]: DS Assoc Resp(10) IF 87 slot 16 vap 0 state ASSOC [*08/28/2024 14:16:33.2654] CLSMFF8:E4:3B:EE:53:AF]: Added to ClientIPTable on wired2 [*08/28/2024 14:16:33.2657] RLAN CFG: rlan add client client F8:E4:3B:EE:53:AF, port 0 vlan: 101 [*08/28/2024 14:16:33.2659] CLSM[F8:E4:3B:EE:53:AF]: Add RLAN client succeeded in vap 0 [*08/28/2024 14:16:33.2660] CLSM[F8:E4:3B:EE:53:AF]: client moved from ASSOC to FWD [*08/28/2024 14:16:33.2661] CLSM[F8:E4:3B:EE:53:AF]: Added to WCP client table AID 0 Radio 16 Vap 0 [*08/28/2024 14:16:33.2664] CLSM[F8:E4:3B:EE:53:AF]: ADD_CENTRAL_AUTH_INFO_MOBILE Payload [*08/28/2024 14:16:33.2667] CLSM[F8:E4:3B:EE:53:AF]: TLV FLEX CENTRAL AUTH STA PAYLOAD [*08/28/2024 14:16:33.2669] CLSM[F8:E4:3B:EE:53:AF]: Decoding TLV_CLIENTCAPABILITYPAYLOAD: capbaility: 0 Apple Client: No 00000000 0000000 0000000 00000000 [*08/28/2024 14:16:35.7577] chatter: dhcp_req_local_sw_nonat: 1724854595.757647899: 0.0.0.0.68 > 255.255.255.255.67: udp 345 [*08/28/2024 14:16:35.7618] chatter: dhcp_from_inet: 1724854595.761843211: 192.168.101.1.67 > 192.168.101.11.68: udp 308 [*08/28/2024 14:16:35.7619] chatter: dhcp_reply_nonat: 1724854595.761843211: 192.168.101.1.67 > 192.168.101.11.68: udp 308 [*08/28/2024 14:16:35.7834] chatter: ethertype_cll: 1724854595.783373680: arp who-has 192.168.101.1 tell 192.168.101.11 [*08/28/2024 14:16:35.7844] chatter: fromdevs_arp_resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:16:36.0169] chatter: ethertype_cll: 1724854596.016884669: arp who-has 192.168.101.11 tell 0.0.0.0 [*08/28/2024 14:16:36.0537] chatter: fromdevs_arp_resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:16:37.0143] chatter: ethertype_cl1: 1724854597.014276961: arp who-has 169.254.233.120 tell 0.0.0.0 [*08/28/2024 14:16:38.0098] chatter: ethertype_cll: 1724854598.009745033: arp who-has 169.254.233.120 tell 0.0.0.0 [*08/28/2024 14:16:39.0159] chatter: ethertype_cll: 1724854599.015890970: arp who-has 169.254.233.120 tell 0.0.0 [*08/28/2024 14:16:41.0055] chatter: ethertype_cll: 1724854601.005426230: arp who-has 192.168.101.11 tell 192.168.101.11 [*08/28/2024 14:16:44.5998] chatter: ethertype_cl1: 1724854604.599751802: arp who-has 192.168.101.1 tell 192.168.101.11 [*08/28/2024 14:16:44.6010] chatter: fromdevs_arp_resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:16:50.5117] chatter: ethertype_cll: 1724854610.511644351: arp who-has 192.168.101.1 (64:8F:3E:D5:E5:C1) tell 192.168.101.11 [*08/28/2024 14:16:50.5129] chatter: fromdevs arp resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:16:56.0159] chatter: ethertype_cll: 1724854616.015864610: arp who-has 192.168.101.1 (64:8F:3E:D5:E5:C1) tell 192.168.101.11 [*08/28/2024 14:16:56.0181] chatter: fromdevs_arp_resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:17:01.5107] chatter: ethertype_cll: 1724854621.510631795: arp who-has 192.168.101.1 (64:8F:3E:D5:E5:C1) tell 192.168.101.11 [*08/28/2024 14:17:01.5118] chatter: fromdevs_arp_resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:17:07.5075] chatter: ethertype_cl1: 1724854627.507420491: arp who-has 192.168.101.1 (64:8F:3E:D5:E5:C1) tell 192.168.101.11 [*08/28/2024 14:17:07.5086] chatter: fromdevs_arp_resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:17:11.3535] chatter: ethertype_cll: 1724854631.353461218: arp who-has 192.168.101.1 tell 192.168.101.11 [*08/28/2024 14:17:11.3550] chatter: fromdevs_arp_resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1 [*08/28/2024 14:17:16.0084] chatter: ethertype cl1: 1724854636.008371529: arp who-has 192.168.101.1 (64:8F:3E:D5:E5:C1) tell 192.168.101.11 [*08/28/2024 14:17:16.0098] chatter: fromdevs arp resp: arp reply 192.168.101.1 is-at 64:8F:3E:D5:E5:C1

Debugs for Local Switched RLAN