

Guest Anchor with Centralized EoGRE

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Feature History for Guest Anchor with Centralized EoGRE

This table provides release and related information for the feature explained in this module.

This feature is also available in all the releases subsequent to the one in which they are introduced in, unless noted otherwise.

Release	Feature	Feature Information
Cisco IOS XE Cupertino 17.7.1	Guest Anchor with Centralized EoGRE	The Guest Anchor with Centralized EoGRE feature for Cisco Embedded Wireless Controller (EWC) allows you to provide internet services to wireless guest clients.

Information About Guest Anchor with Centralized EoGRE

You can provide internet services to guest wireless clients and also safeguard your company's internal information and infrastructure assets by using the Guest Anchor with Centralized EoGRE feature on the Cisco Embedded Wireless Controller (EWC). The guest anchor feature on EWC uses EoGRE as the tunnel between the primary access point (AP) on the EWC platform and the gateway router. Client traffic flows from the subordinate APs to the primary AP and then to the EoGRE tunnel gateway.

Guidelines and Limitations for Guest Anchor with Centralized EoGRE

Cisco EWC does not support AP and client SSO. After the switchover, guest clients are cleaned up, causing interruption in the client traffic. Guest clients rejoin after switchover and traffic is then re-established.

Enabling Guest Anchor with Centralized EoGRE

To support guest anchoring using centralized EoGRE, complete the following configurations in the given order.

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Configuring Wireless Profile Tunnel Under Wireless Profile Policy (CLI)

	Command or Action	Purpose	
Step 1	configure terminal	Enters global configuration mode.	
	Example:		
	Device# configure terminal		
Step 2	wireless profile policy policy_profile_name	Configures wireless policy profile and goes into wireless policy configuration mode.	
	Example:		
	<pre>Device(config)# wireless profile policy open_policy</pre>		
Step 3	no central dhcp	Configures local DHCP mode, where the DHe is performed in an AP.	
	Example:		
	Device(config-wireless-policy)# no central dhcp		
Step 4	no central switching	Configures a WLAN for local switching.	
	Example:		

Procedure

	Command or Action	Purpose
	<pre>Device(config-wireless-policy)# no central switching</pre>	
Step 5	ipv4 dhcp required	Enables the FlexConnect DHCP-Required
	Example:	feature.
	Device(config-wireless-policy)# ipv4 dhcp required	
Step 6	tunnel-profile tunnel-profile-name	Configures a tunnel profile.
	Example:	
	<pre>Device(config-wireless-policy)# tunnel-profile eogre_central</pre>	
Step 7	vlan vlan-id	Configures the VLAN name or ID.
	Example:	
	Device(config-wireless-policy) # vlan 2121	
Step 8	no shutdown	Enables the profile policy.
	Example:	
	Device(config-wireless-policy)# no shutdown	

Configuring Central Forwarding (GUI)

Procedure

Step 1	From the Cisco Embedded Wireless Controller for Catalyst Access Points GUI, choose Configuration > Tags & Profiles > EoGRE .
Step 2	Click the Tunnel Profiles tab.
Step 3	Under the Tunnel Profiles tab, click Add . The Add Tunnel Profile window is displayed.
Step 4	Click the Central Forwarding toggle button to enable the feature.
Step 5	Click Apply to Device.

Configuring Central Forwarding (CLI)

Procedure

	Command or Action	Purpose	
Step 1	configure terminal	Enters global configuration mode.	
	Example:		

	Command or Action	Purpose
	Device# configure terminal	
Step 2	wireless profile tunnel tunnel-profile-name Example:	Configures wireless tunnel profile and goes into tunnel profile configuration mode.
	<pre>Device(config)# wireless profile tunnel tunnel-profile-name</pre>	
Step 3	central-forwarding	Enables centralized forwarding.
	Example:	
	<pre>Device(config-tunnel-profile)# central-forwarding</pre>	

Configuring DHCP Required Under Policy Profile (CLI)

Procedure

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 2	wireless profile policy policy-profile-name	Configures a policy profile.
	Example:	
	<pre>Device(config)# wireless profile policy policy-profile-name</pre>	
Step 3	ipv4 dhcp required	Configures the DHCP parameters for a WLAN.
	Example:	
	<pre>Device(config-wireless-policy)# ipv4 dhcp required</pre>	

Configuration Examples of ACLs for Guest Clients

Guest clients and local clients use the same network resources. Therefore, to safeguard the local client traffic with respect to the guest traffic, default ACLs are pushed for guest clients.

If a WLAN has an EoGRE guest tunnel profile, you can push the default ACLs to block traffic to the local subnet and ACLs to block the multicast traffic for guest clients.

The following example shows you the recommended configuration of ACLs for guest clients:

IPv4 ACL

```
Device# configure terminal
Device(config)# ip access-list extended igmp
Device(config-ext-nacl)# 10 deny igmp any any
Device(config-ext-nacl)# 20 permit ip any any
```

```
Device(config) # wireless profile flex igmp-flex
Device(config-wireless-flex-profile) # acl-policy igmp
Device(config) # wireless tag site sp-flex-site
Device(config-site-tag) # flex-profile igmp-flex
Device(config-site-tag) # no local-site
Device# show ip access-lists
Extended IP access list igmp
1 deny igmp any any
2 permit ip any any
```

IPv6 ACL

```
Device(config)# wireless profile flex igmp-flex
Device(config-wireless-flex-profile)# acl-policy igmp
Device(config-wireless-flex-profile)# acl-policy mldv6
```

```
Device(config)# ipv6 access-list igmp
Device(config-ipv6-acl)# sequence 10 deny icmp any any mld-query
Device(config-ipv6-acl)# sequence 20 deny icmp any any mld-reduction
Device(config-ipv6-acl)# sequence 30 deny icmp any any mld-report
Device(config-ipv6-acl)# sequence 40 deny icmp any any mld-v2-report
Device(config-ipv6-acl)# sequence 50 permit ipv6 any any
Device(config-ipv6-acl)# acl-policy mldv6
```

Device# show ipv6 access-list Extended IPv6 access list mldv6 10 deny 58 any any 20 deny 58 any any 30 deny 58 any any 40 deny 58 any any 50 permit ipv6 any any

```
Device(config) # wireless profile policy policy-name
Device(config-wireless-policy) # ipv4 acl igmp
Device(config-wireless-policy) # ipv6 acl mldv6
```

Verifying Centralized EoGRE Guest Clients

To verify the centralized EoGRE guest clients, run the following command:

	nnel eogre clien AP MAC	t central-forwarding summary Domain	Tunnel	VLAN
74xx.38xx.88xx	Ocxx.f8xx.9cxx Ocd0.f8xx.9cxx Ocd0.f8xx.9cxx	domain1	N/A N/A N/A	2121 2121 2121 2121