

# 使用外部身份验证配置本地Web身份验证

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## 简介

本文档介绍如何在9800无线局域网控制器(WLC)上配置本地网络身份验证和本地身份验证。

## 先决条件

Cisco建议您了解9800 WLC配置模型。

## 要求

Cisco 建议您了解以下主题：

- Cisco WLC 9800系列。
- 全面的Web身份验证知识。

## 使用的组件

本文档中的信息基于以下软件和硬件版本：

- 9800-CL WLC Cisco IOS® XE版本17.12.5
- 思科接入点C9117AXI。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

## 背景信息

本地Web身份验证(LWA)是可在WLC上配置的无线局域网(WLAN)身份验证方法。当用户从可用网络列表中选择WLAN时，会将其重定向到Web门户。在此门户中，根据配置的不同，可能会提示用户输入用户名和密码、接受可接受使用策略(AUP)或结合使用这两种操作以最终完成其连接。

有关登录过程中出现的四种Web身份验证页的信息，请参阅[配置本地Web身份验证](#)指南，并查看[Web身份验证类型的可用选项](#)。您还可以参考[Types of Authentication](#)部分下的[Configure Local Web Authentication with External Authentication](#)指南。

## 参数映射

参数映射是WLC上启用Web身份验证的基本配置元素。它包含一组设置，用于管理Web身份验证过程的各个方面，包括身份验证类型、重定向URL、附加参数、超时和自定义Web页。要激活和管理特定SSID的基于Web的身份验证，此映射必须链接到WLAN配置文件。

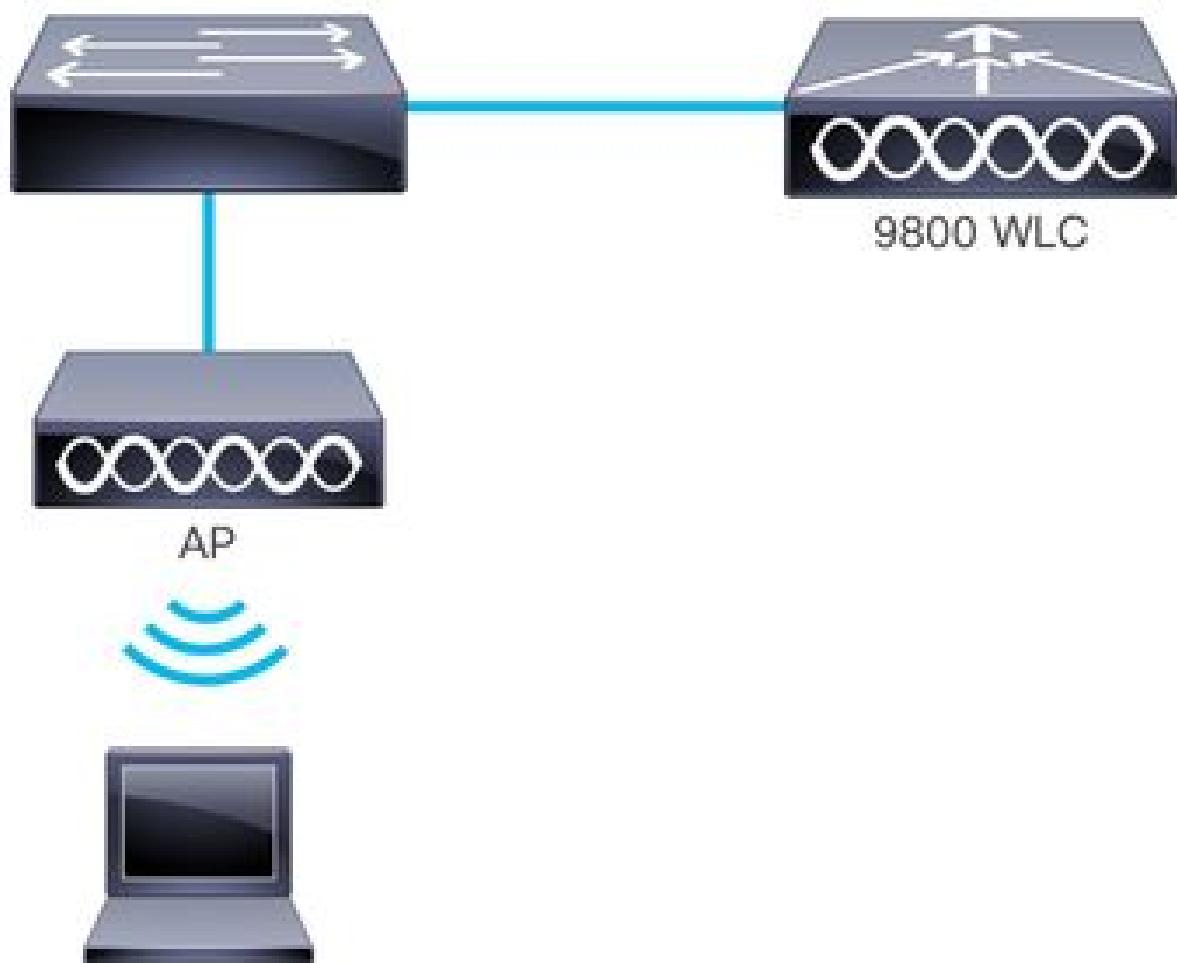
无线LAN控制器随附默认全局参数映射，但管理员可以选择创建自定义参数映射，以便根据特定需求自定义Web身份验证行为。

## 用于身份验证的数据库

如果参数映射配置为使用用户名和密码，则必须定义身份验证凭证，这些凭证存储在WLC本地。通过GUI创建访客用户帐户时，可以设置每个访客帐户允许的最大同时登录数。有效值范围为0至64，其中0表示该访客用户允许无限制的同时登录。

LWA主要用于小型部署。它支持与其他身份验证方法的集成，您可以查看[客户端支持的身份验证组合](#)以获取详细信息。

该图像表示LWA的通用拓扑：



## 具有本地身份验证的LWA的通用拓扑

LWA网络拓扑中的设备：

- 客户端/请求方：向WLAN发起连接请求，稍后向DHCP和DNS服务器发起连接请求，并响应来自WLC的通信。
- 接入点：连接到交换机，它会广播访客WLAN并为访客设备提供无线连接。在访客用户完成身份验证之前，它通过输入有效凭证、接受AUP或两者组合来允许DHCP和DNS流量。
- WLC/身份验证器：管理AP和客户端设备。WLC托管重定向URL并实施访问控制列表(ACL)，在配置参数映射时管理流量以及默认创建的流量。它拦截来自访客用户的HTTP请求，并将它们重定向到Web门户（登录页面），用户必须在该门户中进行身份验证。WLC捕获用户凭证，对访客进行身份验证，并检查本地数据库以验证凭证有效性。
- 身份验证服务器：在此场景中，WLC用作身份验证服务器。它会验证访客用户凭证，并相应地授予或拒绝网络访问。

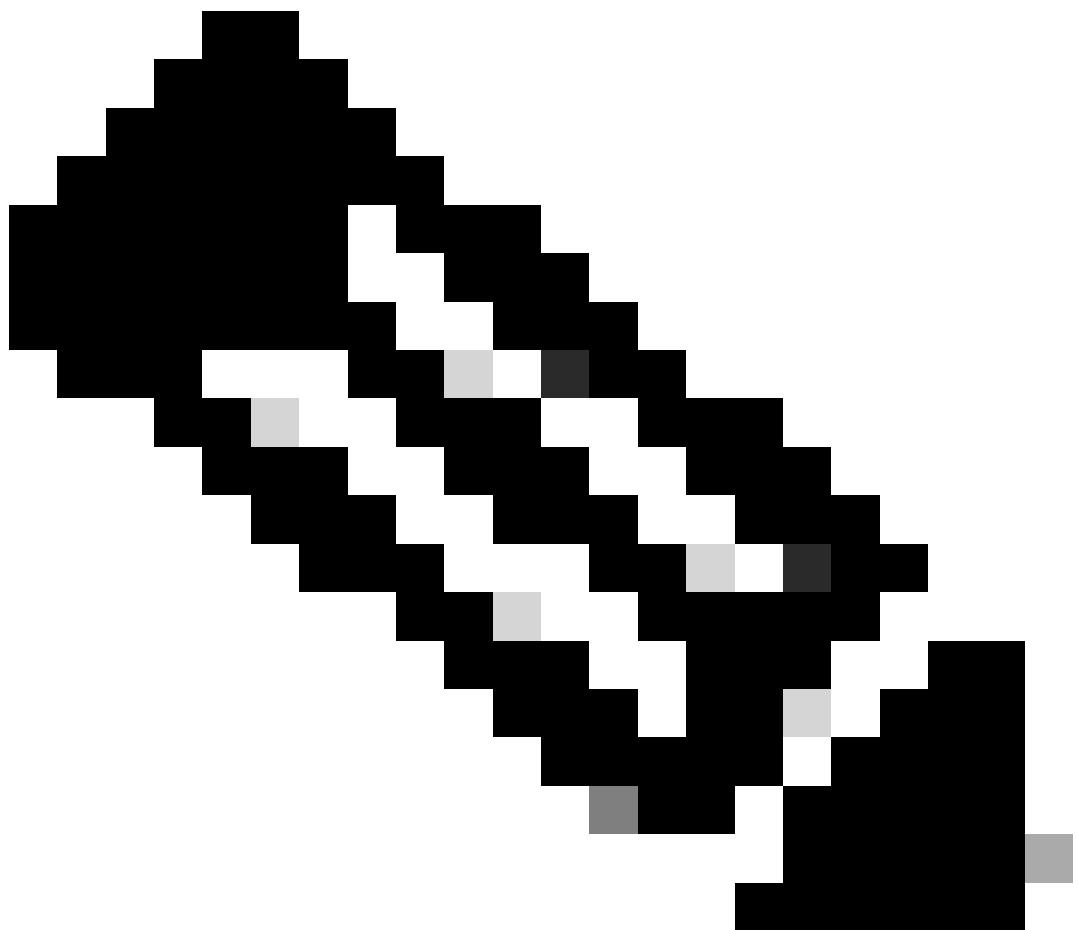
## 配置

## 在CLI上使用本地身份验证进行本地Web身份验证

### 本地身份验证的方法列表

```
9800WLC>enable
9800WLC#configure terminal
9800WLC(config)#aaa new-model
9800WLC(config)#aaa authentication login LWA_AUTHENTICATION local
9800WLC(config)#aaa authorization network default local
9800WLC(config)#end
```

---



注意：要使Local Login Method List正常工作，请确保WLC上存在配置aaa authorization network default local。当WLC授权用户进入网络时，这是必要的。

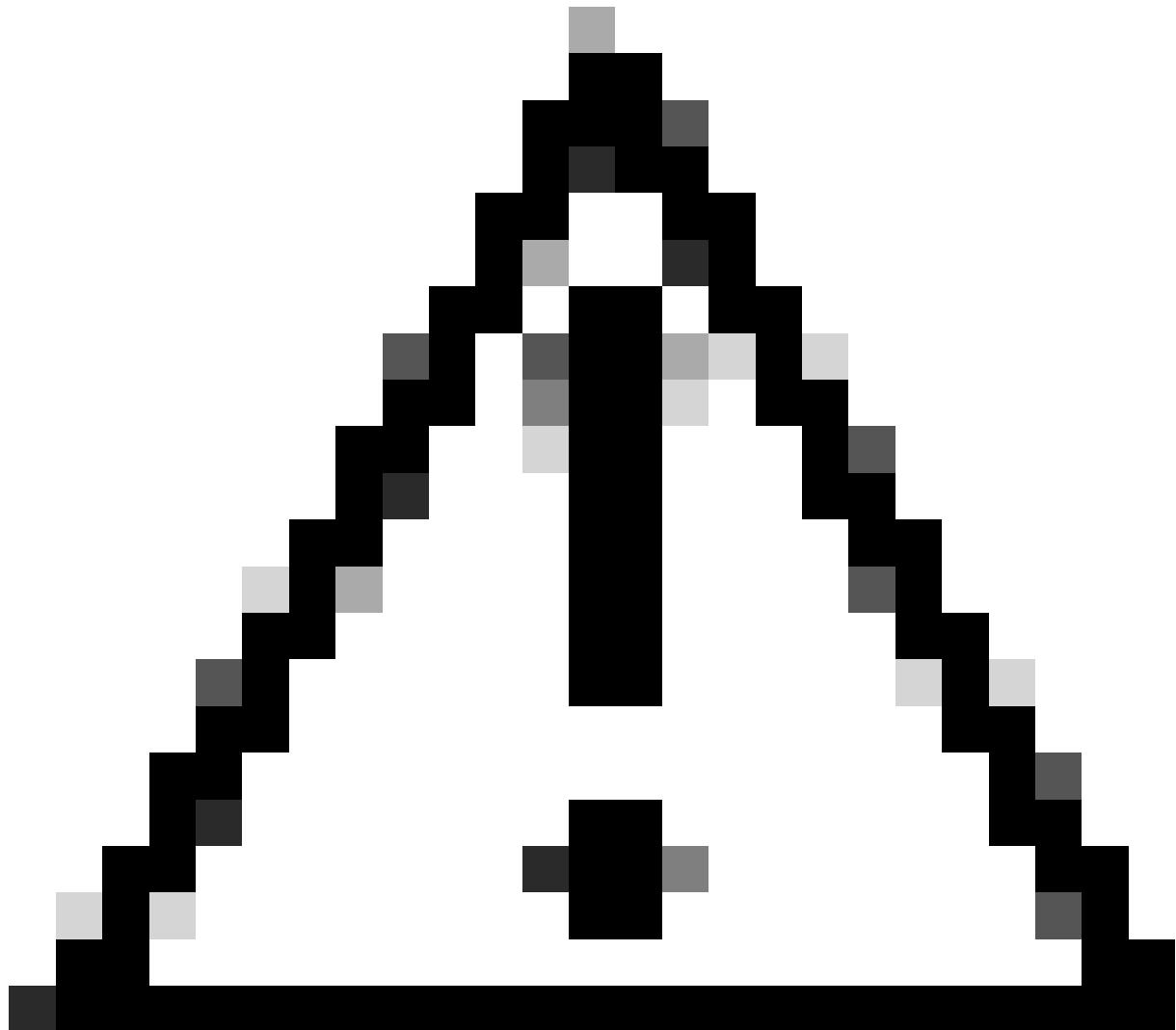
---

## 参数映射

```
9800WLC>enable
9800WLC#configure terminal
9800WLC(config)#parameter-map type webauth global
9800WLC(config-params-parameter-map)#type webauth
9800WLC(config-params-parameter-map)#virtual-ip ipv4 192.0.2.1
9800WLC(config-params-parameter-map)#trustpoint
```

```
9800WLC(config-params-parameter-map)#webauth-http-enable
```

```
9800WLC(config-params-parameter-map)#end
```



警告：虚拟IP必须是RFC 5737中建议的不可路由地址。默认情况下，IP 192.0.2.1已设置。有关虚拟IP地址的详细信息，请参阅[Cisco Catalyst 9800系列配置最佳实践](#)。在AireOs上，大多数时候使用的IP是1.1.1.1。由于它已成为公共IP，因此不再建议使用。

创建多个参数映射的功能可实现定制流程：自定义网页和每个WLAN的特定演示参数。全局参数映射确定信任点，从而确定WLC在重定向门户上向客户端提供的证书。此外，它还控制拦截的客户端流量的类型，例如重定向门户的HTTP/HTTPS、虚拟IP地址的域或主机名解析。这种分离允许全局映射处理总体设置，例如证书表示和流量拦截，而用户定义的参数映射则提供每个WLAN的精细体验。

## WLAN安全参数

```
9800WLC>enable  
9800WLC#configure terminal  
9800WLC(config)#wlan LWA_LA 1 "LWA LA"
```

```
9800WLC(config-wlan)#no security wpa
9800WLC(config-wlan)#no security wpa wpa2
9800WLC(config-wlan)#no security wpa wpa2 ciphers aes
9800WLC(config-wlan)#no security wpa akm dot1x
9800WLC(config-wlan)#security web-auth
9800WLC(config-wlan)#security web-auth authentication-list LWA_AUTHENTICATION
9800WLC(config-wlan)#security web-auth parameter-map global
9800WLC(config-wlan)#no shutdown
9800WLC(config-wlan)#end
```

## 创建策略配置文件

```
9800WLC>enable
9800WLC#configure terminal
9800WLC(config)#wireless profile policy
```

```
9800WLC(config-wireless-policy)#vlan
```

```
9800WLC(config-wireless-policy)#no shutdown
```

```
9800WLC(config-wireless-policy)#end
```

## 创建策略标记

```
9800WLC>enable
9800WLC#configure terminal
9800WLC(config)#wireless tag policy
```

```
9800WLC(config-policy-tag)#wlan LWA_LA policy
```

```
9800WLC(config-policy-tag)# end
```

## 为AP分配策略标记

```
9800WLC>enable  
9800WLC#configure terminal  
9800WLC(config)#ap
```

>

```
9800WLC(config-ap-tag)#policy-tag POLICY_TAG
```

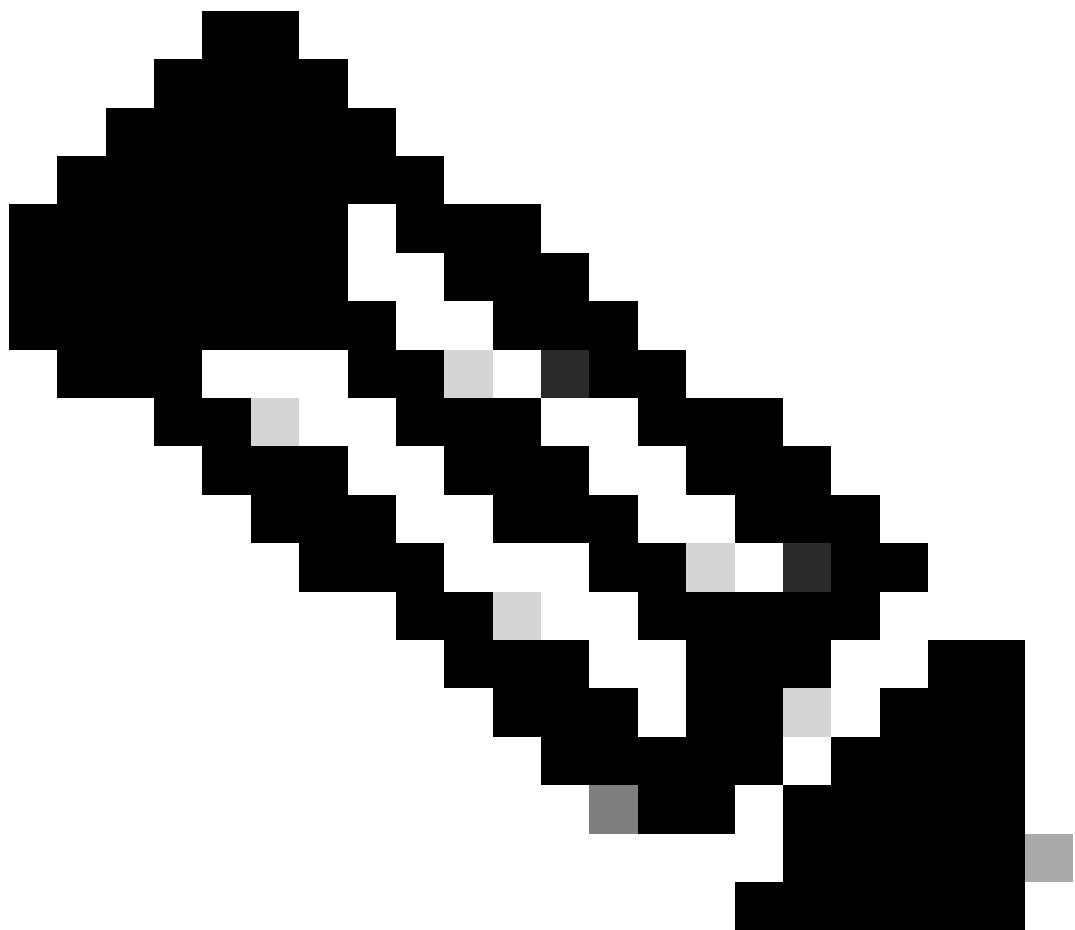
```
9800WLC(config-ap-tag)#end
```

## 创建访客用户名

```
9800WLC>enable  
9800WLC#configure terminal  
9800WLC(config)#user-name johndoe  
9800WLC(config-user-name)#description Guest-User  
9800WLC(config-user-name)#password 0 Cisco123  
9800WLC(config-user-name)#type network-user description
```

```
guest-user lifetime year 0 month 11 day 30 hour 23
```

```
9800WLC(config-user-name)#end
```



注意：在为访客用户设置生存期时，如果年份设置为1，则不能指定后续参数，即月、日、小时和分钟，因为最大生存期为1年。

---

## 通过WebUI使用本地身份验证的本地Web身份验证

### 本地身份验证的方法列表

导航到Configuration > Security > AAA > AAA Method List > Authentication > Add以创建稍后用于WLAN配置的方法列表。

The screenshot shows the 'AAA Method List' configuration screen. On the left, there are tabs for 'Authentication', 'Authorization', and 'Accounting'. The 'Authorization' tab is selected. A modal dialog titled 'Quick Setup: AAA Authentication' is open, prompting for a 'Method List Name\*' (set to 'LWA-AUTHENTICATION'), 'Type\*' (set to 'login'), and 'Group Type' (set to 'local'). Below the dialog, two lists show 'Available Server Groups' (containing 'radius', 'ldap', 'tacacs+', and 'AAA-group') and 'Assigned Server Groups' (empty). Navigation arrows between the lists are visible. At the bottom of the dialog are 'Cancel' and 'Apply to Device' buttons.

单击Apply to Device后，确认创建AAA方法列表：

确保保存在本地授权方法列表，这是为工作而创建的本地登录方法列表的要求。

Configuration > Security > AAA > AAA Method List > Authorization > Add

The screenshot shows the 'AAA Method List' configuration screen. At the top, there are tabs for 'Servers / Groups', 'AAA Method List' (which is selected), and 'AAA Advanced'. Below these are tabs for 'Authentication', 'Authorization' (which is selected), and 'Accounting'. A central table lists an 'exec' method named 'default' with 'local' group type, and 'N/A' for Group1 and Group2. A modal window titled 'Quick Setup: AAA Authorization' is open, allowing configuration of a new method list. The 'Method List Name\*' field is set to 'default', 'Type\*' is 'network', and 'Group Type' is 'local'. The 'Authenticated' checkbox is unchecked. On the left, 'Available Server Groups' include 'radius', 'ldap', 'tacacs+', and 'AAA-group'. On the right, 'Assigned Server Groups' is an empty list. Navigation buttons for 'Cancel' and 'Apply to Device' are at the bottom of the modal.

单击Apply to Device后，确认创建AAA方法列表：

The screenshot shows the 'AAA Method List' configuration screen after applying the changes. The table now includes two entries: one for 'exec' type and one for 'network' type, both named 'default' and assigned to 'local' group type. The second row, which is the 'network' type entry, is highlighted with a red border. The bottom of the table shows page navigation with '1 ~ 2 of 2 items'.

## 参数映射

在Configuration > Security > Web Auth中编辑全局参数映射

Configuration > Security > Web Auth

Edit Web Auth Parameter

**General** Advanced

Parameter-map Name	global	Virtual IPv4 Address	192.0.2.1
Maximum HTTP connections	100	Trustpoint	TP-self-signed-...
Init-State Timeout(secs)	120	Virtual IPv4 Hostname	
Type	webauth	Virtual IPv6 Address	XXXXXX
Captive Bypass Portal	<input type="checkbox"/>	Web Auth intercept HTTPS	<input type="checkbox"/>
Disable Success Window	<input type="checkbox"/>	Enable HTTP server for Web Auth	<input checked="" type="checkbox"/>
Disable Logout Window	<input type="checkbox"/>	Disable HTTP secure server for Web Auth	<input type="checkbox"/>
Disable Cisco Logo	<input type="checkbox"/>	Banner Configuration	
Sleeping Client Status	<input type="checkbox"/>	Banner Title	
Sleeping Client Timeout (minutes)	720	Banner Type	<input checked="" type="radio"/> None <input type="radio"/> Banner Text <input type="radio"/> Read From File

选择要使用的Web身份验证类型、虚拟IP和WLC在Web门户上显示的信任点。在这种情况下，选择自签名证书，并且可能会导致“您的连接不是私有网络：:ERR\_CERT\_AUTHORITY\_INVALID”类型的免责声明，因为这是本地重要证书(LSC)，并且不是由互联网上可识别的CA签名。要修改此内容，请使用第三方签名证书。有关详细信息，请参阅[在Catalyst 9800 WLC上生成和下载CSR证书](#)，或者有一个视频选项说明在[Cisco 9800 WLC上为WebAuth和WebAdmin上传和Truspoint创建续订证书 | 安全无线局域网控制器设置。](#)

## Edit Web Auth Parameter

X

General Advanced

Parameter-map Name

global

Virtual IPv4 Address

192.0.2.1

Maximum HTTP connections

100

Trustpoint

TP-self-signed-...

Init-State Timeout(secs)

120

Virtual IPv4 Hostname

Type

webauth

Captive Bypass Portal

Web Auth intercept  
HTTPs

Disable Success Window

Enable HTTP server for  
Web Auth

Disable Logout Window

Disable HTTP secure  
server for Web Auth

Disable Cisco Logo

Sleeping Client Status

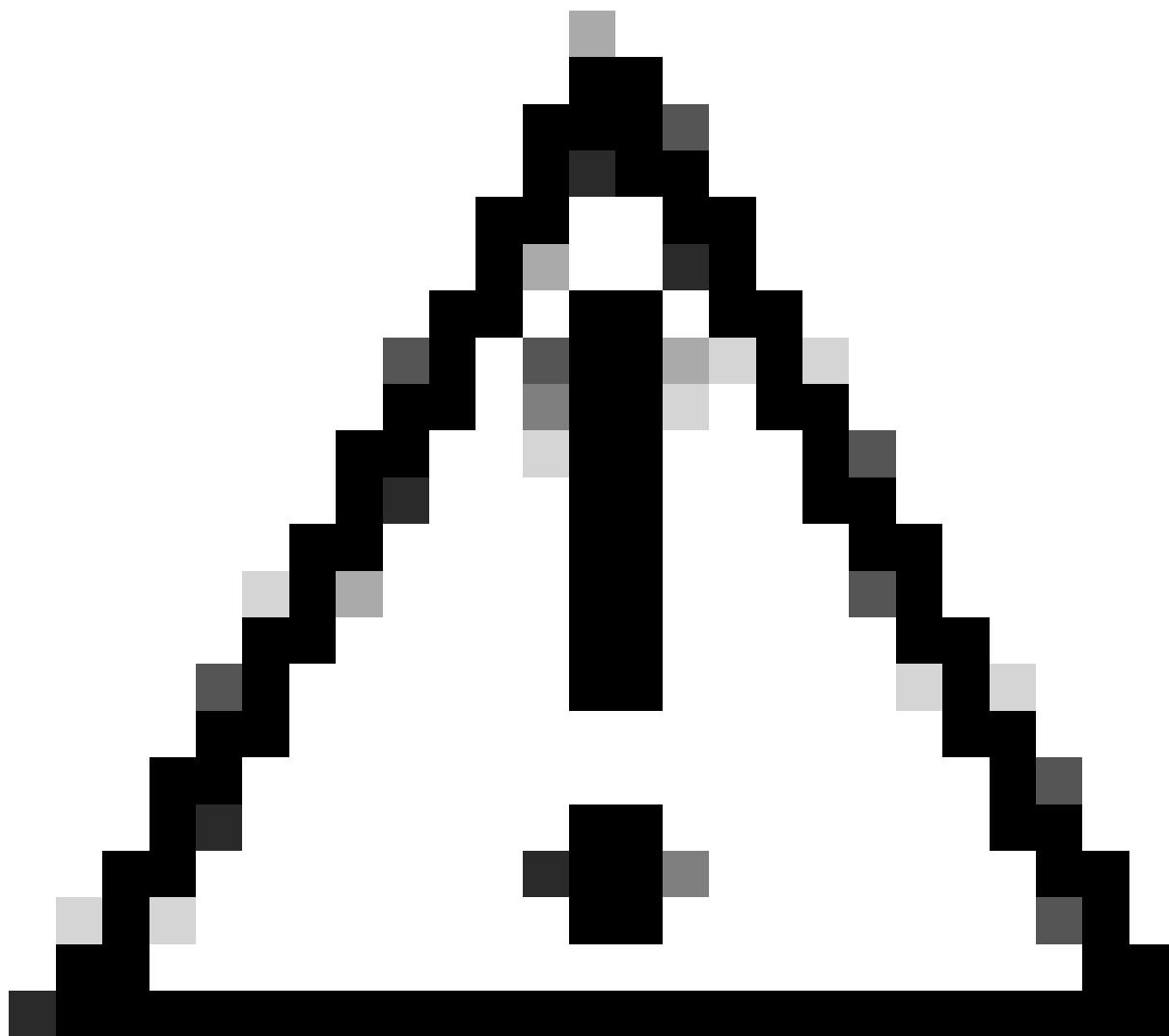
Banner Configuration

Sleeping Client Timeout  
(minutes)

720

Banner Title

None    Banner Text  
 Read From File



**警告**：如果在9800上全局禁用了HTTP，请确保选中Enable HTTP server for Web Auth，因为思科将这些进程的依赖关系分隔开。客户端或Supplicant客户端将启动HTTP连接进程，并且控制器会拦截该会话以显示Web门户。因此，除非绝对需要，否则不建议启用Web Auth Intercept HTTPS，因为此设置对大多数部署来说是不必要的，并且可能会增加控制器CPU利用率，从而影响性能。

---

## WLAN安全参数

导航到Configuration > Tags & Profiles > WLANs，单击Add。

## Edit WLAN



⚠ Changing WLAN parameters while it is enabled will result in loss of connectivity for clients connected to it.

General Security Advanced Add To Policy Tags

Profile Name\*

LWA\_LA

Radio Policy ⓘ

SSID\*

LWA LA

WLAN ID\*

1

6 GHz

Status

ENABLED



Slot 2/3

WPA3 Enabled  
 Dot11ax Enabled

Status

ENABLED



5 GHz

Status

ENABLED



Slot 0  
 Slot 1  
 Slot 2

Broadcast SSID

ENABLED



2.4 GHz

Status

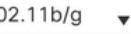
ENABLED



Slot 0

802.11b/g Policy

802.11b/g



在Security选项卡上，对于Layer2，选择None。

## Edit WLAN

⚠ Changing WLAN parameters while it is enabled will result in loss of connectivity for clients connected to it.

General **Security** Advanced Add To Policy Tags

Layer2 Layer3 AAA

⚠ To review the necessary considerations for ensuring WLAN compatibility with Wi-Fi 7 security [click here](#).

WPA + WPA2     WPA2 + WPA3     WPA3     Static WEP     None

MAC Filtering

OWE Transition Mode

Lobby Admin Access

### Fast Transition

Status

Over the DS

Reassociation Timeout \*

在Security选项卡上，对于Layer3，选中Web Policy框，从下拉菜单和Authentication List中选择以前配置的参数映射。

## Edit WLAN

⚠ Changing WLAN parameters while it is enabled will result in loss of connectivity for clients connected to it.

General **Security** Advanced Add To Policy Tags

Layer2 **Layer3** AAA

Web Policy

[<< Hide](#)

On MAC Filter Failure

Web Auth Parameter Map

Splash Web Redirect

Authentication List

### Preattribution ACL

For Local Login Method List to work, please make sure  
the configuration 'aaa authorization network default local'  
exists on the device

IPv4

IPv6

## 创建策略配置文件

要创建要链接到WLAN配置文件的策略配置文件，请导航到配置>标记和配置文件>策略。

Edit Policy Profile ×

**General** Access Policies QOS and AVC Mobility Advanced

**WLAN Switching Policy**

Name*	LWA_CentralSW	Central Switching	<b>ENABLED</b> <input checked="" type="checkbox"/>
Description	Enter Description	Central Authentication	<b>ENABLED</b> <input checked="" type="checkbox"/>
Status	<b>ENABLED</b> <input checked="" type="checkbox"/>	Central DHCP	<b>ENABLED</b> <input checked="" type="checkbox"/>
Passive Client	<b>DISABLED</b> <input type="checkbox"/>	Flex NAT/PAT	<b>DISABLED</b> <input type="checkbox"/>
IP MAC Binding	<b>ENABLED</b> <input checked="" type="checkbox"/>		
Encrypted Traffic Analytics	<b>DISABLED</b> <input type="checkbox"/>		

**CTS Policy**

Inline Tagging	<input type="checkbox"/>
SGACL Enforcement	<input type="checkbox"/>
Default SGT	2-65519

在Access Policies选项卡上，选择Clients/Supplicant客户端从中请求IP的VLAN。

## Edit Policy Profile

**⚠** Disabling a Policy or configuring it in 'Enabled' state, will result in loss of connectivity for clients associated with this Policy profile.

General    **Access Policies**    QOS and AVC    Mobility    Advanced

RADIUS Profiling

WLAN ACL

HTTP TLV Caching

IPv4 ACL

Search or Select



DHCP TLV Caching

IPv6 ACL

Search or Select



WLAN Local Profiling

Global State of Device Classification

Enabled

Local Subscriber Policy Name

Search or Select



Pre Auth

Search or Select



VLAN

VLAN/VLAN Group

2622



Multicast VLAN

Enter Multicast VLAN

URL Filters

Post Auth

Search or Select



## 创建策略标记

在本配置指南中，我们创建了名为LWA的自定义策略标记。

## Edit Policy Tag

**⚠** Changes may result in loss of connectivity for some clients that are associated to APs with this Policy Tag.

Name\*

LWA

Description

LWA\_LA

### WLAN-POLICY Maps: 1

+ Add

× Delete

WLAN Profile	Policy Profile
<input type="checkbox"/> LWA_LA	LWA_CentralSW

## 关联WLAN和策略配置文件

要将Policy Profile和WLAN中的交换策略链接，请导航到Configuration > Tags & Profiles >

WLANs , 选择WLAN Profile , 然后点击Add to Policy Tags。

The screenshot shows the 'Edit WLAN' configuration page. The 'Add To Policy Tags' tab is active. A warning message at the top states: '⚠ Changing WLAN parameters while it is enabled will result in loss of connectivity for clients connected to it.' Below the tabs are two buttons: '+ Add' and '× Delete'. The main area displays a table with two rows:

<input type="checkbox"/>	Policy Tag	Policy Profile	<input type="checkbox"/>
<input type="checkbox"/>	LWA	LWA_CentralSW	

Below the table are navigation controls: back, forward, page number (1), page size (10), and a total count of '1 - 1 of 1 items'.

#### 为AP分配策略标记

要使用已创建的策略标记对AP进行标记，请导航到Configuration > Wireless > Access Points , 选择AP , 在General选项卡上 , 右侧是AP使用的标记。

## Edit AP



General Interfaces High Availability Inventory Geolocation Advanced Support Bundle

### General

AP Name\* 9117

Location\* default location

Base Radio MAC cc0

Ethernet MAC c00

Admin Status ENABLED

AP Mode Local

Operation Status Registered

Fabric Status Disabled

#### LED Settings

LED State ENABLED

Brightness Level 8

#### Flash Settings

Flash State DISABLED

Apply

### Time Statistics

Up Time 8 days 15 hrs 26 mins 48 secs

Controller Association Latency 1 sec

### Tags

Policy LWA

Site default-site-tag

RF default-rf-tag

Write Tag Config to AP

### Version

Primary Software Version 17.12.5.41

Predownloaded Status N/A

Predownloaded Version N/A

Next Retry Time N/A

Boot Version 1.1.2.4

IOS Version 17.12.5.41

Mini IOS Version 0.0.0.0

### IP Config

CAPWAP Preferred Mode IPv4

DHCP IPv4 Address 172.16.60.40

Static IP (IPv4/IPv6)



Cancel

Update & Apply to Device

## 创建访客用户名

如果您在参数映射中选择了webauth类型，则需要访客用户名，要创建它，请导航到配置>安全>访客用户。

用户的最大生存时间为1年。您可以使用可用选项指定其他选项。

+ Add    × Delete

Selected Rows: 0

<input type="checkbox"/> User Name
<input type="checkbox"/> johndoe

10 items per page

**General**

Enter User Name*	johndoe
Password*	Enter Password <input type="password"/>
Confirm Password	Confirm Password
Description*	Guest-User
AAA Attribute list	Enter>Select
No. of Simultaneous User Logins*	0 <small>Enter 0 for unlimited users</small>
Start Time	15:21:19 UTC Aug 26 2025
Expiry Time	15:21:19 UTC Aug 21 2026
Remaining Time	0 years 11 months 29 days 23 hours 34 mins 24 secs

**Lifetime**

Years*	1
Months*	0
Days*	0
Hours*	0
Mins*	0

## 验证

### 通过GUI

Cisco Catalyst 9800-CL Wireless Controller

Monitoring > Wireless > Clients

Clients    Sleeping Clients    Excluded Clients

Selected 0 out of 1 Clients

Client MAC Address	IPv4 Address	IPv6 Address	AP Name	Slot ID	SSID	WLAN ID	Client Type	State	Protocol	User Name	Device Type	Role	802.11 Capable
9ef2:4b16:a507	172.16.74.83	fe80::9cf2:4bff:fe16:a507	9117	0	LWA LA	1	WLAN	Run	11ax(2.4)	johndoe	N/A	Local	No

1 - 1 of 1 clients

Monitoring > Wireless > Clients

Clients Sleeping Clients Excluded Clients

Selected 0 out of 1 Clients

Client MAC Address	IPv4 Address	IPv6 Address	AP Name	Slot ID	SSID
507	172.16.74.83	fe80::9cf2:4bff:fe16:a507	-9117	0	LWA LA

10

Client

General QoS Statistics ATF Statistics Mobility History Call Statistics

Client Properties AP Properties Security Information Client Statistics QoS Properties EoGRE

MAC Address	[REDACTED] x507
Client MAC Type	Locally Administered Address
Client DUID	NA
IPv4 Address	172.16.74.83
IPv6 Address	fe80::9cf2:4bff:fe16:a507
User Name	johndoe
Policy Profile	LWA_CentralSW
Flex Profile	N/A
Wireless LAN Id	1
WLAN Profile Name	LWA_LA
Wireless LAN Network Name (SSID)	LWA LA
BSSID	0cd0.f897.acc0
Uptime(sec)	151 seconds
Idle state timeout	N/A
Session Timeout	28800 sec (Remaining time: 28678 sec)
Session Warning Time	Timer not running
Client Active State	Active
Power Save mode	ON
Current TxRateSet	1.0
Supported Rates	1.0,2.0,5.5,6.0,9.0,11.0,12.0,18.0,24.0,36.0,48.0,54.0
QoS Average Data Rate Upstream	0 (kbps)
QoS Realtime Average Data Rate Upstream	0 (kbps)
QoS Burst Data Rate Upstream	0 (kbps)
QoS Realtime Burst Data Rate Upstream	0 (kbps)
QoS Average Data Rate Downstream	0 (kbps)
QoS Realtime Average Data Rate Downstream	0 (kbps)
QoS Burst Data Rate Downstream	0 (kbps)
QoS Realtime Burst Data Rate Downstream	0 (kbps)
Join Time Of Client	09/10/2025 21:26:11 UTC
Policy Manager State	Run
Last Policy Manager State	Weauth Pending
Transition Disable Bitmap	0x00
User Defined (Private) Network	Disabled
User Defined (Private) Network Drop Unicast	Disabled

OK

## 通过CLI

```
9800WLC>enable
9800WLC#show wireless client summary
Number of Clients: 1
MAC Address      AP Name      Type ID State Protocol Method    Role
-----
9ef2.4b16.a507   xxxxx-9117 WLAN 1  Run   11ax(2.4) Web Auth Local
9800WLC#show wireless client mac-address
```

detail

Client MAC Address : 9ef2.4b16.a507

Client MAC Type : Locally Administered Address

Client DUID: NA

Client IPv4 Address : 172.16.74.83

Client IPv6 Addresses : fe80::9cf2:4bff:fe16:a507

Client Username : johndoe

AP MAC Address : 0cd0.f897.acc0

AP Name: xxxxx-9117

AP slot : 0

Client State : Associated

Policy Profile : LWA\_CentralSW

Flex Profile : N/A

Wireless LAN Id: 1

WLAN Profile Name: LWA\_LA

Wireless LAN Network Name (SSID): LWA LA

BSSID : 0cd0.f897.acc0

Connected For : 392 seconds

Protocol : 802.11ax - 2.4 GHz

Channel : 11

Client IIF-ID : 0xa0000002

Association Id : 1

Authentication Algorithm : Open System

Idle state timeout : N/A

Session Timeout : 28800 sec (Remaining time: 28455 sec)

Session Warning Time : Timer not running

Input Policy Name : None

Input Policy State : None

Input Policy Source : None

Output Policy Name : None

Output Policy State : None

Output Policy Source : None

WMM Support : Enabled

U-APSD Support : Disabled

Fastlane Support : Disabled

Client Active State : Active

Power Save : ON

Current Rate : m0 ss2

Supported Rates : 1.0,2.0,5.5,6.0,9.0,11.0,12.0,18.0,24.0,36.0,48.0,54.0

AAA QoS Rate Limit Parameters:

QoS Average Data Rate Upstream : 0 (kbps)

QoS Realtime Average Data Rate Upstream : 0 (kbps)

QoS Burst Data Rate Upstream : 0 (kbps)

QoS Realtime Burst Data Rate Upstream : 0 (kbps)

QoS Average Data Rate Downstream : 0 (kbps)

QoS Realtime Average Data Rate Downstream : 0 (kbps)

QoS Burst Data Rate Downstream : 0 (kbps)

QoS Realtime Burst Data Rate Downstream : 0 (kbps)

Mobility:

Move Count : 0

Mobility Role : Local

Mobility Roam Type : None

Mobility Complete Timestamp : 09/10/2025 21:41:11 UTC

Client Join Time:

Join Time Of Client : 09/10/2025 21:41:11 UTC

Client State Servers : None

Client ACLs : None

Policy Manager State: Run

Last Policy Manager State : Webauth Pending

Client Entry Create Time : 392 seconds

Policy Type : N/A

Encryption Cipher : None

Transition Disable Bitmap : 0x00

User Defined (Private) Network : Disabled

User Defined (Private) Network Drop Unicast : Disabled

Encrypted Traffic Analytics : No

Protected Management Frame - 802.11w : No

EAP Type : Not Applicable

VLAN Override after Webauth : No

VLAN : 2667

Multicast VLAN : 0

VRF Name : N/A

**WiFi Direct Capabilities:**

WiFi Direct Capable : No

Central NAT : DISABLED

**Session Manager:**

Point of Attachment : capwap\_90400005

IIF ID : 0x90400005

Authorized : TRUE

Session timeout : 28800

Common Session ID: 044A10AC0000000F359351E3

Acct Session ID : 0x00000000

**Auth Method Status List**

Method : Web Auth

Webauth State : Authz

Webauth Method : Webauth

**Local Policies:**

Service Template : IP-Adm-V4-LOGOUT-ACL (priority 100)

URL Redirect ACL : IP-Adm-V4-LOGOUT-ACL

Service Template : wlan\_svc\_LWA\_CentralSW\_local (priority 254)

VLAN : 2667

Absolute-Timer : 28800

Server Policies:

Resultant Policies:

URL Redirect ACL : IP-Adm-V4-LOGOUT-ACL

VLAN Name : xxxxx

VLAN : 2667

Absolute-Timer : 28800

DNS Snooped IPv4 Addresses : None

DNS Snooped IPv6 Addresses : None

Client Capabilities

CF Pollable : Not implemented

CF Poll Request : Not implemented

Short Preamble : Not implemented

PBCC : Not implemented

Channel Agility : Not implemented

Listen Interval : 0

Fast BSS Transition Details :

Reassociation Timeout : 0

11v BSS Transition : Implemented

11v DMS Capable : No

QoS Map Capable : Yes

FlexConnect Data Switching : N/A

FlexConnect Dhcp Status : N/A

FlexConnect Authentication : N/A

**Client Statistics:**

Number of Bytes Received from Client : 111696

Number of Bytes Sent to Client : 62671

Number of Packets Received from Client : 529

Number of Packets Sent to Client : 268

Number of Data Retries : 136

Number of RTS Retries : 0

Number of Tx Total Dropped Packets : 1

Number of Duplicate Received Packets : 0

Number of Decrypt Failed Packets : 0

Number of Mic Failed Packets : 0

Number of Mic Missing Packets : 0

Number of Policy Errors : 0

Radio Signal Strength Indicator : -61 dBm

Signal to Noise Ratio : 4 dB

Fabric status : Disabled

## Radio Measurement Enabled Capabilities

Capabilities: Link Measurement, Neighbor Report, Repeated Measurements, Passive Beacon Measurement, Act

Client Scan Report Time : Timer not running

## Client Scan Reports

Assisted Roaming Neighbor List

Nearby AP Statistics:

EoGRE : Pending Classification

Max Client Protocol Capability: Wi-Fi6 (802.11ax)

WiFi to Cellular Steering : Not implemented

Cellular Capability : N/A

Advanced Scheduling Requests Details:

Apple Specific Requests(ASR) Capabilities/Statistics:

Regular ASR support: DISABLED

## FlexConnect本地交换上的本地Web身份验证

对于此场景，假设AP处于FlexConnect模式。对于处于FlexConnect模式的AP，您需要在SiteTag上关联一个Flex配置文件，其中Enable Local Site复选框处于禁用状态。此站点标签使用默认的ap-join和自定义的弹性配置文件名称Flex\_LWA：

## 为AP分配策略标记

导航到Configuration > Wireless > Access Points，选择AP，在General选项卡的右侧是AP使用的标记。

General	Tags
AP Name* Location* Base Radio MAC Ethernet MAC Admin Status AP Mode Operation Status Fabric Status LED Settings LED State Flash Settings Flash State	Policy: LWA Site: FlexConnect RF: default-rf-tag Write Tag Config to AP Version Primary Software Version: 17.12.5.41 Predownloaded Status: N/A Predownloaded Version: N/A Next Retry Time: N/A Boot Version: 1.1.2.4 IOS Version: 17.12.5.41 Mini IOS Version: 0.0.0.0 IP Config CAPWAP Preferred Mode: Not Configured DHCP IPv4 Address: 172.16.60.40 Static IP (IPv4/IPv6)



警告：更改标记会导致AP断开WLC连接。

Configuration > Wireless > Access Points

All Access Points

AP Name	AP Model	Slots	Admin Status	Up Time	IP Address	Base Radio MAC	Ethernet MAC	AP Mode	Power Derate Capable	Operation Status	Configuration Status	Country Code Misconfigured	LSC Fallback Misconfigure
9117	C9117AXI-A	2	✓	8 days 15 hrs 54 mins 53 secs	172.16.60.40	cc0	c00	Flex	No	Registered	Healthy	No	No

与WLAN关联的策略配置文件是本地交换

Edit WLAN

⚠ Changing WLAN parameters while it is enabled will result in loss of connectivity for clients connected to it.

General Security Advanced Add To Policy Tags

+ Add × Delete

Policy Tag	Policy Profile
<input type="checkbox"/> LWA	LWA_LocalSW

1 - 1 of 1 items

Configuration > Tags & Profiles > Policy

+ Add × Delete Clone

Policy Profile Name
LWA_LocalSW

Edit Policy Profile

⚠ Disabling a Policy or configuring it in 'Enabled' state, will result in loss of connectivity for clients associated with this Policy profile.

General	Access Policies	QoS and AVC	Mobility	Advanced
Name*: LWA_LocalSW	WLAN Switching Policy	Central Switching	Central Authentication	DISABLED
Description: Enter Description	Central DHCP	Flex NAT/PAT	ENABLED	
Status: ENABLED	IP MAC Binding	Encrypted Traffic Analytics	ENABLED	
Passive Client: DISABLED	CTS Policy	CTS Policy	DISABLED	
IP MAC Binding: ENABLED	Inline Tagging	SGACL Enforcement	ENABLED	
Encrypted Traffic Analytics: DISABLED	Default SGT: 2-65519			

## 验证

```
9800WLC>enable
9800WLC#show wireless client summary
Number of Clients: 1
MAC Address      AP Name      Type ID  State Protocol Method    Role
-----
9ef2.4b16.a507  xxxxx-9117  WLAN 1  Run  11ax(2.4) Web Auth Local
9800WLC#show wireless client mac-address
```

detail

Client MAC Address :

Client MAC Type : Locally Administered Address

Client DUID: NA

Client IPv4 Address : 172.16.74.83

Client IPv6 Addresses : fe80::9cf2:4bff:fe16:a507

Client Username : johndoe

AP MAC Address : xxxx.xxxx.xcc0

AP Name: xxxxxx-9117

AP slot : 0

Client State : Associated

Policy Profile : LWA\_LocalsW

Flex Profile : Flex\_LWA

Wireless LAN Id: 1

WLAN Profile Name: LWA\_LA

Wireless LAN Network Name (SSID): LWA LA

BSSID : 0cd0.f897.acc0

Connected For : 315 seconds

Protocol : 802.11ax - 2.4 GHz

Channel : 6

Client IIF-ID : 0xa0000004

Association Id : 1

Authentication Algorithm : Open System

Idle state timeout : N/A

Session Timeout : 28800 sec (Remaining time: 28525 sec)

Session Warning Time : Timer not running

Input Policy Name : None

Input Policy State : None

Input Policy Source : None

Output Policy Name : None

Output Policy State : None

Output Policy Source : None

WMM Support : Enabled

U-APSD Support : Disabled

Fastlane Support : Disabled

Client Active State : Active

Power Save : ON

Current Rate : m11 ss2

Supported Rates : 1.0,2.0,5.5,6.0,9.0,11.0,12.0,18.0,24.0,36.0,48.0,54.0

AAA QoS Rate Limit Parameters:

QoS Average Data Rate Upstream : 0 (kbps)

QoS Realtime Average Data Rate Upstream : 0 (kbps)

QoS Burst Data Rate Upstream : 0 (kbps)

QoS Realtime Burst Data Rate Upstream : 0 (kbps)

QoS Average Data Rate Downstream : 0 (kbps)

QoS Realtime Average Data Rate Downstream : 0 (kbps)

QoS Burst Data Rate Downstream : 0 (kbps)

QoS Realtime Burst Data Rate Downstream : 0 (kbps)

Mobility:

Move Count : 0

Mobility Role : Local

Mobility Roam Type : None

Mobility Complete Timestamp : 09/11/2025 17:38:26 UTC

Client Join Time:

Join Time Of Client : 09/11/2025 17:38:26 UTC

Client State Servers : None

Client ACLs : None

Policy Manager State: Run

Last Policy Manager State : Webauth Pending

Client Entry Create Time : 315 seconds

Policy Type : N/A

Encryption Cipher : None

Transition Disable Bitmap : 0x00

User Defined (Private) Network : Disabled

User Defined (Private) Network Drop Unicast : Disabled

Encrypted Traffic Analytics : No

Protected Management Frame - 802.11w : No

EAP Type : Not Applicable

VLAN Override after Webauth : No

VLAN : 2667

Multicast VLAN : 0

VRF Name : N/A

WiFi Direct Capabilities:

WiFi Direct Capable : No

Central NAT : DISABLED

Session Manager:

Point of Attachment : capwap\_90400005

IIF ID : 0x90400005

Authorized : TRUE

Session timeout : 28800

Common Session ID: 044A10AC0000002A39DB6F52

Acct Session ID : 0x00000000

Auth Method Status List

Method : Web Auth

Webauth State : Authz

Webauth Method : Webauth

**Local Policies:**

Service Template : IP-Adm-V4-LOGOUT-ACL (priority 100)

URL Redirect ACL : IP-Adm-V4-LOGOUT-ACL

Service Template : wlan\_svc\_LWA\_LocalsW (priority 254)

VLAN : 2667

Absolute-Timer : 28800

**Server Policies:**

**Resultant Policies:**

URL Redirect ACL : IP-Adm-V4-LOGOUT-ACL

VLAN Name : xxxxx

VLAN : 2667

Absolute-Timer : 28800

DNS Snooped IPv4 Addresses : None

DNS Snooped IPv6 Addresses : None

**Client Capabilities**

CF Pollable : Not implemented

CF Poll Request : Not implemented

Short Preamble : Not implemented

PBCC : Not implemented

Channel Agility : Not implemented

Listen Interval : 0

Fast BSS Transition Details :

Reassociation Timeout : 0

11v BSS Transition : Implemented

11v DMS Capable : No

QoS Map Capable : Yes

FlexConnect Data Switching : Local

FlexConnect Dhcp Status : Central

FlexConnect Authentication : Central

Client Statistics:

Number of Bytes Received from Client : 295564

Number of Bytes Sent to Client : 90146

Number of Packets Received from Client : 1890

Number of Packets Sent to Client : 351

Number of Data Retries : 96

Number of RTS Retries : 0

Number of Tx Total Dropped Packets : 0

Number of Duplicate Received Packets : 0

Number of Decrypt Failed Packets : 0

Number of Mic Failed Packets : 0

Number of Mic Missing Packets : 0

Number of Policy Errors : 0

Radio Signal Strength Indicator : -34 dBm

Signal to Noise Ratio : 31 dB

Fabric status : Disabled

Radio Measurement Enabled Capabilities

Capabilities: Link Measurement, Neighbor Report, Repeated Measurements, Passive Beacon Measurement, Active Beacon Measurement

Client Scan Report Time : Timer not running

Client Scan Reports

Assisted Roaming Neighbor List

Nearby AP Statistics:

EoGRE : Pending Classification

Max Client Protocol Capability: Wi-Fi6 (802.11ax)

WiFi to Cellular Steering : Not implemented

Cellular Capability : N/A

Advanced Scheduling Requests Details:

Apple Specific Requests(ASR) Capabilities/Statistics:

Regular ASR support: DISABLED

The screenshot shows the 'Clients' section of the Cisco WLC management interface. On the left, a table lists clients with columns for Client MAC Address, IPv4 Address, IPv6 Address, AP Name, Slot ID, and SSID. One row is selected, showing details for a client with MAC address 507, IP 172.16.74.83, AP 9117, and SSID LWA LA. On the right, a detailed view of the selected client's properties is shown under the 'General' tab. The 'Policy Profile' and 'Flex Profile' fields are both set to 'LWA\_LocalSW' and are highlighted with a red box.

Client	360 View	General	QoS Statistics	ATF Statistics	Mobility History	Call Statistics
	<a href="#">Client Properties</a>	<a href="#">AP Properties</a>	<a href="#">Security Information</a>	<a href="#">Client Statistics</a>	<a href="#">QoS Properties</a>	<a href="#">EoGRE</a>
MAC Address	9ef2:4b16:a507					
Client MAC Type	Locally Administered Address					
Client DUID	NA					
IPv4 Address	172.16.74.83					
IPv6 Address	fe80::9cf2:4bff:fe16:a507					
User Name	johndoe					
Policy Profile	LWA_LocalSW					
Flex Profile	Flex_LWA					
Wireless LAN Id	1					
WLAN Profile Name	LWA_LA					
Wireless LAN Network Name (SSID)	LWA LA					
BSSID	cc0					
Uptime(sec)	103 seconds					
Idle state timeout	N/A					
Session Timeout	28800 sec (Remaining time: 28737 sec)					
Session Warning Time	Timer not running					
Client Active State	Active					
Power Save mode	OFF					
Current TxRateSet	m11 ss2					
Supported Rates	1,0,2,0,5,5,6,0,9,0,11,0,12,0,18,0,24,0,36,0,48,0,54,0					
QoS Average Data Rate Upstream	0 (kbps)					
QoS Realtime Average Data Rate Upstream	0 (kbps)					
QoS Burst Data Rate Upstream	0 (kbps)					
QoS Realtime Burst Data Rate Upstream	0 (kbps)					
QoS Average Data Rate Downstream	0 (kbps)					
QoS Realtime Average Data Rate Downstream	0 (kbps)					
QoS Burst Data Rate Downstream	0 (kbps)					
QoS Realtime Burst Data Rate Downstream	0 (kbps)					
Join Time Of Client	09/11/2025 17:38:26 UTC					
Policy Manager State	Run					
Last Policy Manager State	Weauth Pending					
Transition Disable Bitmap	0x00					
User Defined (Private) Network	Disabled					
User Defined (Private) Network Drop Unicast	Disabled					

## 故障排除

“Web Auth Pending”状态表示客户端已与接入点关联，但尚未完成Web身份验证过程。在此状态下，控制器会拦截客户端HTTP流量并将其重定向到Web身份验证门户，以便用户登录或接受条款。客户端将保持此状态，直到成功完成Web身份验证，然后客户端策略管理器状态转换为“运行”并授予完整网络访问权限。

为了直观地查看客户端连接的流，请从[使用外部身份验证配置本地Web身份验证](#)验证LWA流。

在[排除9800 WLC上LWA的常见问题](#)中，从客户端角度描述了客户端所经历的各个阶段。

- [技术支持和文档 - Cisco Systems](#)

## 关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言，希望全球的用户都能通过各自的语言得到支持性的内容。

请注意：即使是最好的机器翻译，其准确度也不及专业翻译人员的水平。

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