在統一無線網路中配置接入點授權

目錄

簡介

本檔案將說明如何設定WLC，以根據AP的MAC位址授權存取點(AP)。

必要條件

需求

思科建議您瞭解以下主題：

- 有關如何配置思科身份服務引擎(ISE)的基本知識
- Cisco AP和Cisco WLC的配置知識
- 思科統一無線安全解決方案知識

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- 執行AireOS 8.8.111.0軟體的WLCWave1 AP:1700/2700/3700和3500（1600/2600/3600仍受支援，但AireOS支援在8.5.x版結束）Wave2 AP:1800/2800/3800/4800、1540和1560 ISE版本2.3.0.298

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

輕量AP授權

在AP註冊過程中，AP和WLC使用X.509證書相互進行身份驗證。Cisco在工廠將X.509證書燒錄到AP和WLC上的受保護快閃記憶體中。

在AP上，出廠安裝的證書稱為製造安裝的證書(MIC)。 所有在2005年7月18日之後生產的思科AP都具有MIC。

除了在註冊過程中發生的這種相互身份驗證外，WLC還可以根據AP的MAC地址限制向其註冊的AP。

使用AP MAC位址時缺少強式密碼不會造成問題，因為控制器在透過RADIUS伺服器授權AP之前，會使用MIC來驗證AP。MIC的使用提供了強大的身份驗證。

AP授權可通過兩種方式執行：

- 使用WLC上的內部授權清單
- 在AAA伺服器上使用MAC地址資料庫

AP的行為因使用的證書而異：

- 具有SSC的AP - WLC僅使用內部授權清單，不會將請求轉發到這些AP的RADIUS伺服器
- 使用MIC的AP - WLC可以使用WLC上配置的內部授權清單，或使用RADIUS伺服器來授權AP

本文討論使用內部授權清單和AAA伺服器進行AP授權。

設定

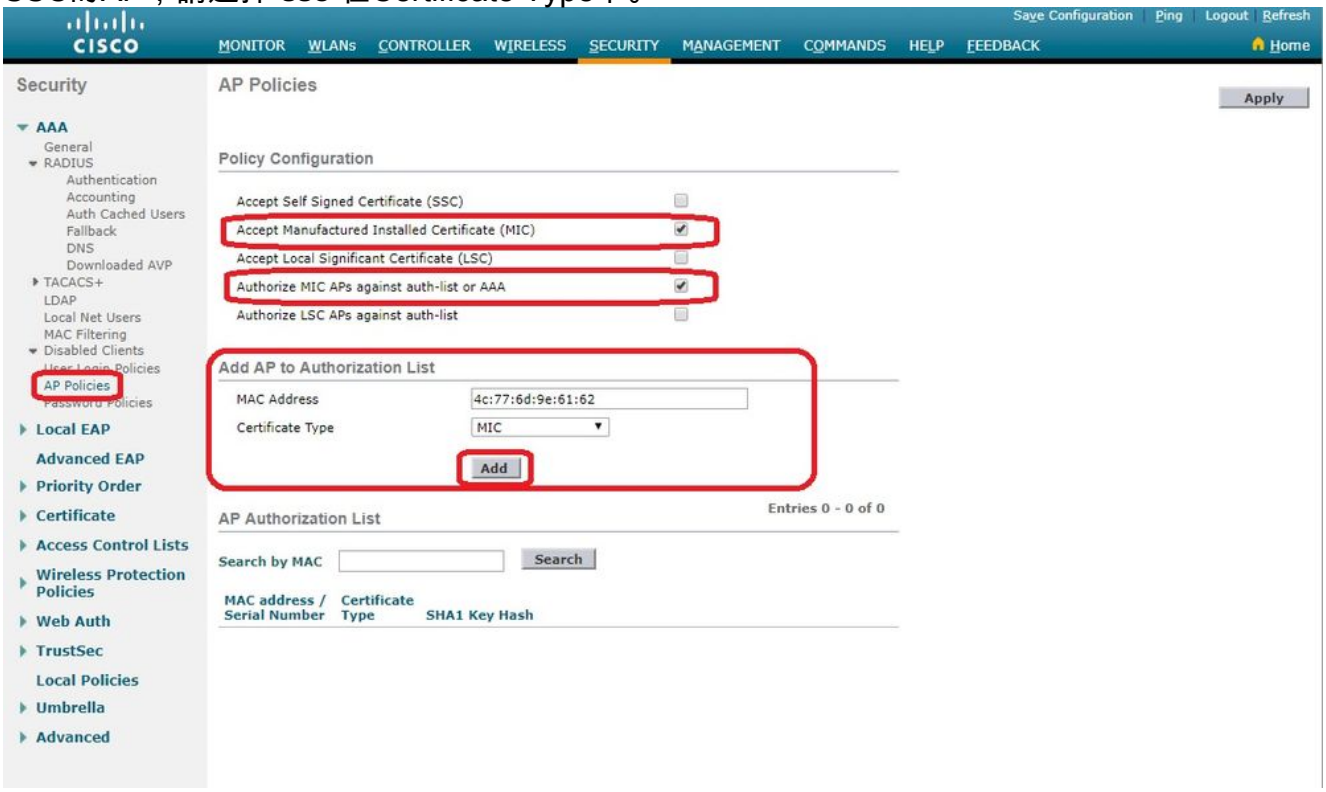
使用WLC上的內部授權清單設定

在WLC上，使用AP授權清單根據其MAC地址限制AP。AP授權清單位於 **Security > AP Policies** 在WLC GUI中。

此示例說明如何新增具有MAC地址的AP **4c:77:6d:9e:61:62**.

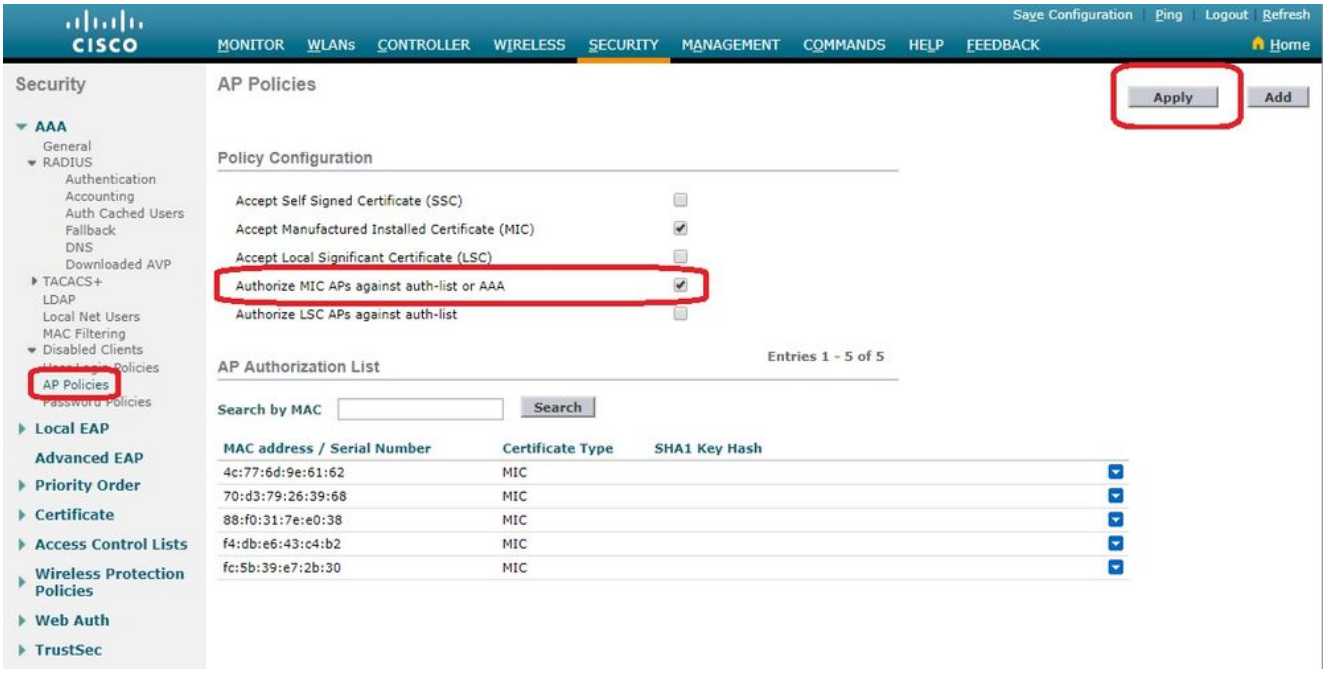
1. 在WLC控制器GUI上，按一下 **Security > AP Policies** 並顯示AP策略頁面。
2. 按一下 **Add** 螢幕右側的按鈕。

3. 在 **Add AP to Authorization List**，請輸入 **AP MAC** 地址（不是AP無線電mac地址）。 然後，選擇證書型別，然後按一下 **Add**.在此範例中，新增了一個具有MIC憑證的AP。**附註**：對於具有SSC的AP，請選擇 **ssc** 在Certificate Type下。



該AP將新增到AP授權清單中，並列在 **AP Authorization List**.

4. 在Policy Configuration（策略配置）下，選中 **Authorize MIC APs against auth-list or AAA**.選擇此引數時，WLC會先檢查本機授權清單。如果AP MAC不存在，它會檢查RADIUS伺服器。



驗證

為了驗證此配置，您需要使用MAC地址連線AP **4c:77:6d:9e:61:62** 到網路和顯示器。使用 **debug capwap events/errors enable** 和 **debug aaa all enable** 命令。

此輸出顯示了當AP MAC地址不在AP授權清單中時的調試：

附註：由於空間限制，輸出中的某些行已移動到第二行。

```
(Cisco Controller) >debug capwap events enable
(Cisco Controller) >debug capwap errors enable
(Cisco Controller) >debug aaa all enable

*spamApTask4: Feb 27 10:15:25.592: 70:69:5a:51:4e:c0 Join Request from 192.168.79.151:5256

*spamApTask4: Feb 27 10:15:25.592: 70:69:5a:51:4e:c0 Unable to get Ap mode in Join request

*spamApTask4: Feb 27 10:15:25.592: 70:69:5a:51:4e:c0 Allocate database entry for AP
192.168.79.151:5256, already allocated index 277

*spamApTask4: Feb 27 10:15:25.592: 70:69:5a:51:4e:c0 AP Allocate request at index 277 (reserved)
*spamApTask4: Feb 27 10:15:25.593: 24:7e:12:19:41:ef Deleting AP entry 192.168.79.151:5256 from
temporary database.
*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 AP group received default-group is found in
ap group configured in wlc.

*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Dropping request or response packet to AP
:192.168.79.151 (5256) by Controller: 10.48.71.20 (5246), message Capwap_wtp_event_response,
state Capwap_no_state

*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 In AAA state 'Idle' for AP
70:69:5a:51:4e:c0
*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Join Request failed!
```

*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 State machine handler: Failed to process msg type = 3 state = 0 from 192.168.79.151:5256

*aaaQueueReader: Feb 27 10:15:25.593: **Unable to find requested user entry for 4c776d9e6162**
*aaaQueueReader: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Normal Response code for AAA Authentication : -9
*aaaQueueReader: Feb 27 10:15:25.593: ReProcessAuthentication previous proto 8, next proto 40000001
*aaaQueueReader: Feb 27 10:15:25.593: AuthenticationRequest: 0x7f01b4083638

*aaaQueueReader: Feb 27 10:15:25.593: Callback.....0xd6cef02166

*aaaQueueReader: Feb 27 10:15:25.593: protocolType.....0x40000001

*aaaQueueReader: Feb 27 10:15:25.593:
proxyState.....70:69:5A:51:4E:C0-00:00

*aaaQueueReader: Feb 27 10:15:25.593: Packet contains 9 AVPs:

*aaaQueueReader: Feb 27 10:15:25.593: AVP[01] User-Name.....4c776d9e6162 (12 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: AVP[02] Called-Station-Id.....70-69-5a-51-4e-c0 (17 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: AVP[03] Calling-Station-Id.....4c-77-6d-9e-61-62 (17 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: AVP[04] Nas-Port.....0x00000001 (1) (4 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: AVP[05] Nas-Ip-Address.....0x0a304714 (170936084) (4 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: AVP[06] NAS-Identifier.....0x6e6f (28271) (2 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: AVP[07] User-Password.....[...]

*aaaQueueReader: Feb 27 10:15:25.593: AVP[08] Service-Type.....0x0000000a (10) (4 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: AVP[09] Message-Authenticator.....DATA (16 bytes)

*aaaQueueReader: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Error Response code for AAA Authentication : -7
*aaaQueueReader: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Returning AAA Error 'No Server' (-7) for mobile 70:69:5a:51:4e:c0 serverIdx 0
*aaaQueueReader: Feb 27 10:15:25.593: AuthorizationResponse: 0x7f017adf5770

*aaaQueueReader: Feb 27 10:15:25.593: RadiusIndexSet(0), Index(0)
*aaaQueueReader: Feb 27 10:15:25.593: resultCode.....-7

*aaaQueueReader: Feb 27 10:15:25.593: protocolUsed.....0xffffffff

*aaaQueueReader: Feb 27 10:15:25.593:
proxyState.....70:69:5A:51:4E:C0-00:00

*aaaQueueReader: Feb 27 10:15:25.593: Packet contains 0 AVPs:

*aaaQueueReader: Feb 27 10:15:25.593: **70:69:5a:51:4e:c0 User entry not found in the Local FileDB for the client.**

```
*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Join Version: = 134770432

*spamApTask0: Feb 27 10:15:25.593: 00:00:00:00:00:00 apType = 54 apModel: AIR-AP4800-E-K

*spamApTask0: Feb 27 10:15:25.593: 00:00:00:00:00:00 apType: Ox36 bundleApImageVer: 8.8.111.0
*spamApTask0: Feb 27 10:15:25.593: 00:00:00:00:00:00 version:8 release:8 maint:111 build:0
*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Join resp: CAPWAP Maximum Msg element len =
79

*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Join Failure Response sent to 0.0.0.0:5256

*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Radius Authentication failed. Closing dtls
Connection.
*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Disconnecting DTLS Capwap-Ctrl session
0xd6f0724fd8 for AP (192:168:79:151/5256). Notify(true)
*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 CAPWAP State: Dtls tear down

*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 acDtlsPlumbControlPlaneKeys:
lrad:192.168.79.151(5256) mwar:10.48.71.20(5246)

*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 DTLS keys for Control Plane deleted
successfully for AP 192.168.79.151

*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 DTLS connection closed event receivedserver
(10.48.71.20/5246) client (192.168.79.151/5256)
*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Entry exists for AP (192.168.79.151/5256)
*spamApTask0: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 AP Delete request
*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 AP Delete request
*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 Unable to find AP 70:69:5a:51:4e:c0
*spamApTask4: Feb 27 10:15:25.593: 70:69:5a:51:4e:c0 No AP entry exist in temporary database for
192.168.79.151:5256
```

此輸出顯示了將LAP MAC地址新增到AP授權清單時的調試：

附註：由於空間限制，輸出中的某些行已移動到第二行。

```
(Cisco Controller) >debug capwap events enable
(Cisco Controller) >debug capwap errors enable
(Cisco Controller) >debug aaa all enable

*spamApTask4: Feb 27 09:50:25.393: 70:69:5a:51:4e:c0 Join Request from 192.168.79.151:5256

*spamApTask4: Feb 27 09:50:25.393: 70:69:5a:51:4e:c0 using already alloced index 274
*spamApTask4: Feb 27 09:50:25.393: 70:69:5a:51:4e:c0 Unable to get Ap mode in Join request

*spamApTask4: Feb 27 09:50:25.393: 70:69:5a:51:4e:c0 Allocate database entry for AP
192.168.79.151:5256, already allocated index 274

*spamApTask4: Feb 27 09:50:25.393: 70:69:5a:51:4e:c0 AP Allocate request at index 274 (reserved)
*spamApTask4: Feb 27 09:50:25.393: 24:7e:12:19:41:ef Deleting AP entry 192.168.79.151:5256 from
temporary database.
*spamApTask4: Feb 27 09:50:25.393: 70:69:5a:51:4e:c0 AP group received default-group is found in
ap group configured in wlc.

*spamApTask4: Feb 27 09:50:25.393: 70:69:5a:51:4e:c0 Dropping request or response packet to AP
:192.168.79.151 (5256) by Controller: 10.48.71.20 (5246), message Capwap_wtp_event_response,
state Capwap_no_state

*spamApTask4: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Message type Capwap_wtp_event_response is
not allowed to send in state Capwap_no_state for AP 192.168.79.151
```

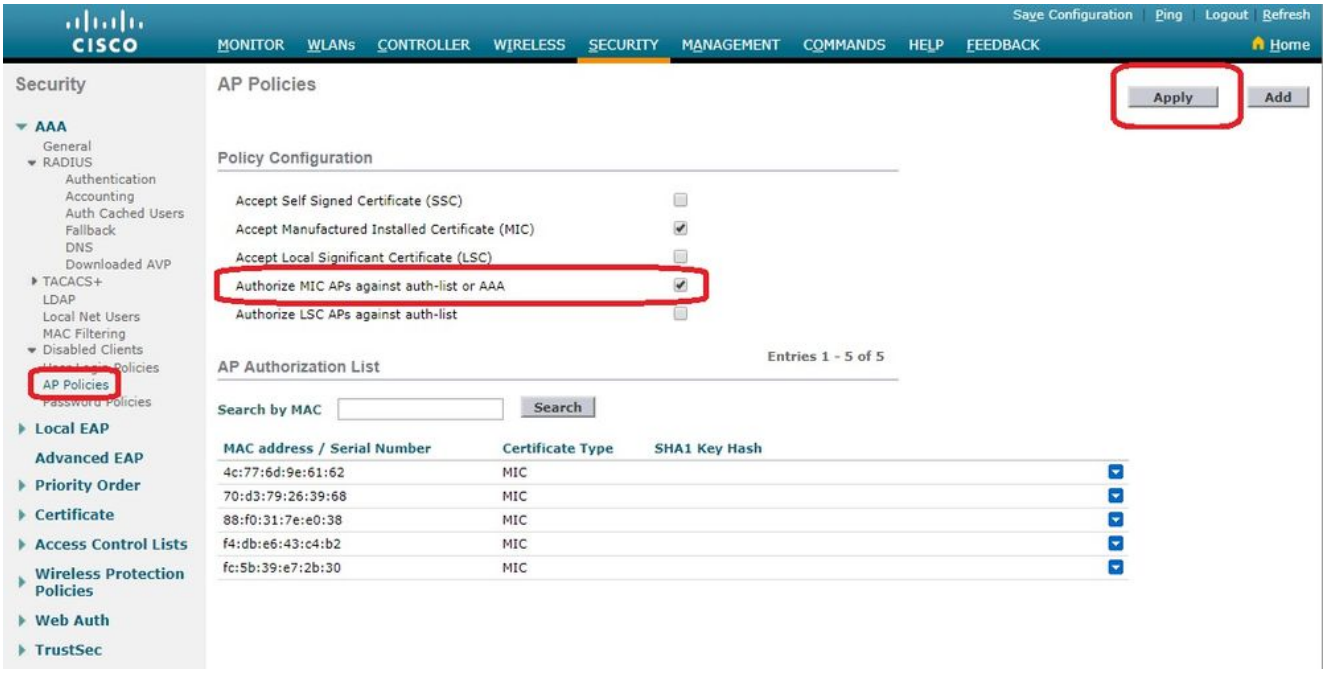
```
*spamApTask4: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 In AAA state 'Idle' for AP
70:69:5a:51:4e:c0
*spamApTask4: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Join Request failed!


*aaaQueueReader: Feb 27 09:50:25.394: User 4c776d9e6162 authenticated
*aaaQueueReader: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Normal Response code for AAA
Authentication : 0
*aaaQueueReader: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Returning AAA Success for mobile
70:69:5a:51:4e:c0
*aaaQueueReader: Feb 27 09:50:25.394: AuthorizationResponse: 0x7f0288a66408


*aaaQueueReader: Feb 27 09:50:25.394: structureSize.............................194

*aaaQueueReader: Feb 27 09:50:25.394: resultCode.................................0

*aaaQueueReader: Feb 27 09:50:25.394:
proxyState.................................70:69:5A:51:4E:C0-00:00

*aaaQueueReader: Feb 27 09:50:25.394: Packet contains 2 AVPs:

*aaaQueueReader: Feb 27 09:50:25.394: AVP[01] Service-
Type.........................0x00000065 (101) (4 bytes)

*aaaQueueReader: Feb 27 09:50:25.394: AVP[02] Airespace / WLAN-
Identifier..............0x00000000 (0) (4 bytes)

*aaaQueueReader: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 User authentication Success with File DB
on WLAN ID :0
*spamApTask0: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Join Version: = 134770432

*spamApTask0: Feb 27 09:50:25.394: 00:00:00:00:00:00 apType = 54 apModel: AIR-AP4800-E-K

*spamApTask0: Feb 27 09:50:25.394: 00:00:00:00:00:00 apType: Ox36 bundleApImageVer: 8.8.111.0
*spamApTask0: Feb 27 09:50:25.394: 00:00:00:00:00:00 version:8 release:8 maint:111 build:0
*spamApTask0: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Join resp: CAPWAP Maximum Msg element len =
79

*spamApTask0: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Join Response sent to 0.0.0.0:5256

*spamApTask0: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 CAPWAP State: Join

*spamApTask0: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 capwap_ac_platform.c:2095 - Operation State
0 ===> 4
*spamApTask0: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Capwap State Change Event (Reg) from
capwap_ac_platform.c 2136

*apfReceiveTask: Feb 27 09:50:25.394: 70:69:5a:51:4e:c0 Register LWAPP event for AP
70:69:5a:51:4e:c0 slot 0
```

針對AAA伺服器的AP授權

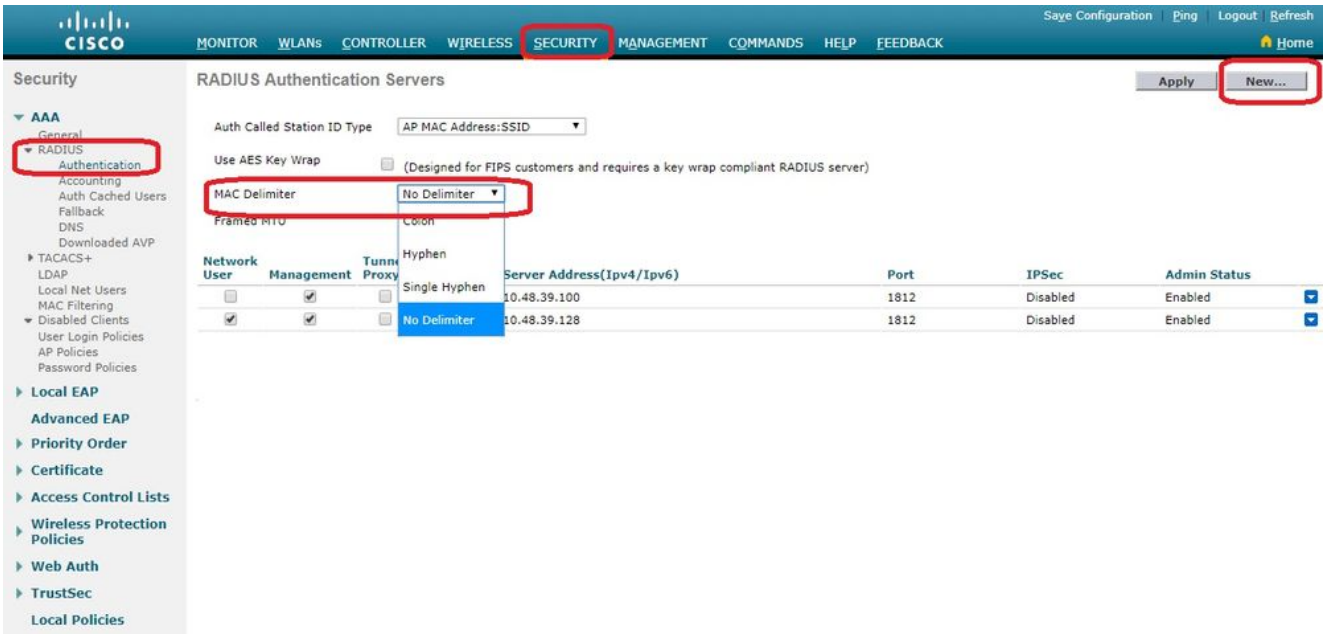
您還可以將WLC配置為使用RADIUS伺服器授權使用MIC的AP。將資訊傳送到RADIUS伺服器時，WLC會使用AP MAC位址作為使用者名稱和密碼。例如，如果AP的MAC地址是 **4c:77:6d:9e:61:62**中，控制器用於授權AP的使用者名稱和密碼都是使用定義的傳遞器的mac地址。

此示例說明如何配置WLC以使用Cisco ISE授權AP。

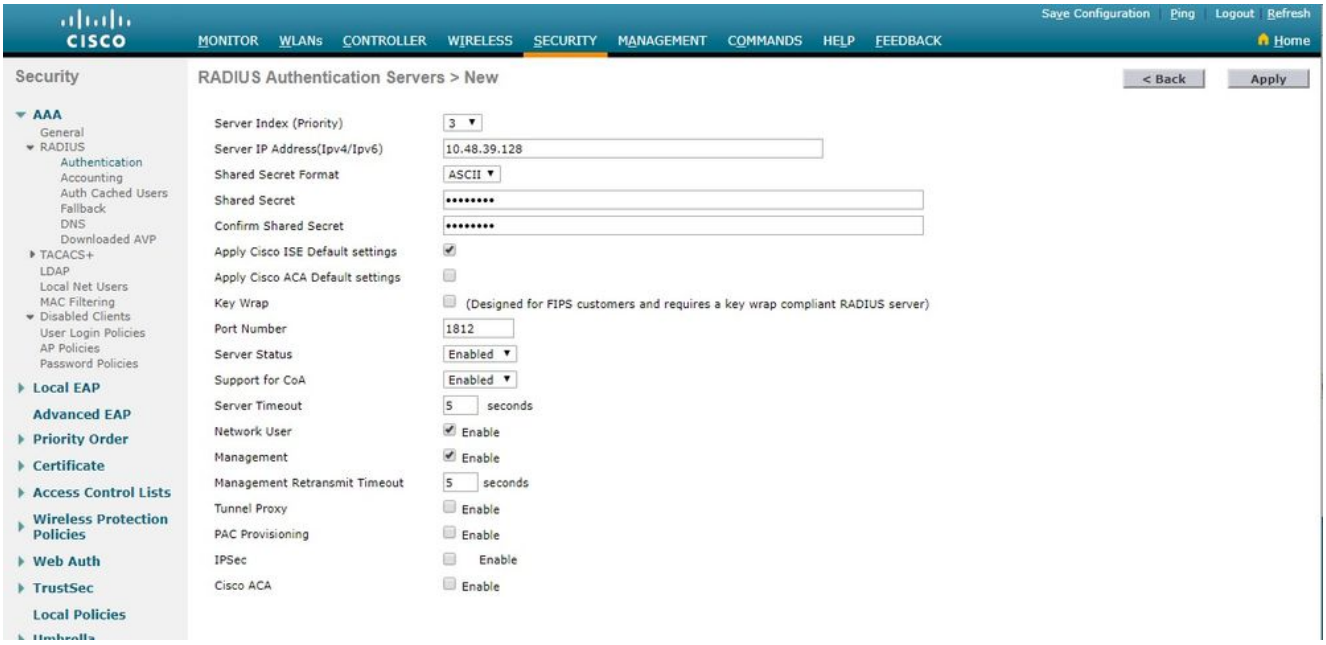
1. 在WLC控制器GUI上，按一下 **Security > AP Policies**.系統將顯示AP Policies頁面。
2. 在Policy Configuration（策略配置）下，選中 **Authorize MIC APs against auth-list or AAA**.選擇此引數時，WLC會先檢查本機授權清單。如果AP MAC不存在，它會檢查RADIUS伺服器。



3. 導航至 **Security > RADIUS Authentication** 從控制器GUI顯示 **RADIUS Authentication Servers** 頁面。在此頁面中，您可以定義**MAC分隔符**。WLC會取得AP Mac位址，並使用此處定義的分隔符將其傳送到Radius伺服器。這很重要，因為使用者名稱會與Radius伺服器中設定的相符。在本示例中， **No Delimiter** 用於使使用者名稱 **4c776d9e6162**.



4. 然後，按一下 **New** 以便定義RADIUS伺服器。



5. 在上定義RADIUS伺服器引數 **RADIUS Authentication Servers > New** 頁面。這些引數包括RADIUS **Server IP Address**中， **Shared Secret**中， **Port Number**,和 **Server Status**.完成後，按一下 **Apply**.此示例使用Cisco ISE作為IP地址為10.48.39.128的RADIUS伺服器。

配置Cisco ISE以授權AP

要啟用思科ISE授權AP，您需要完成以下步驟：

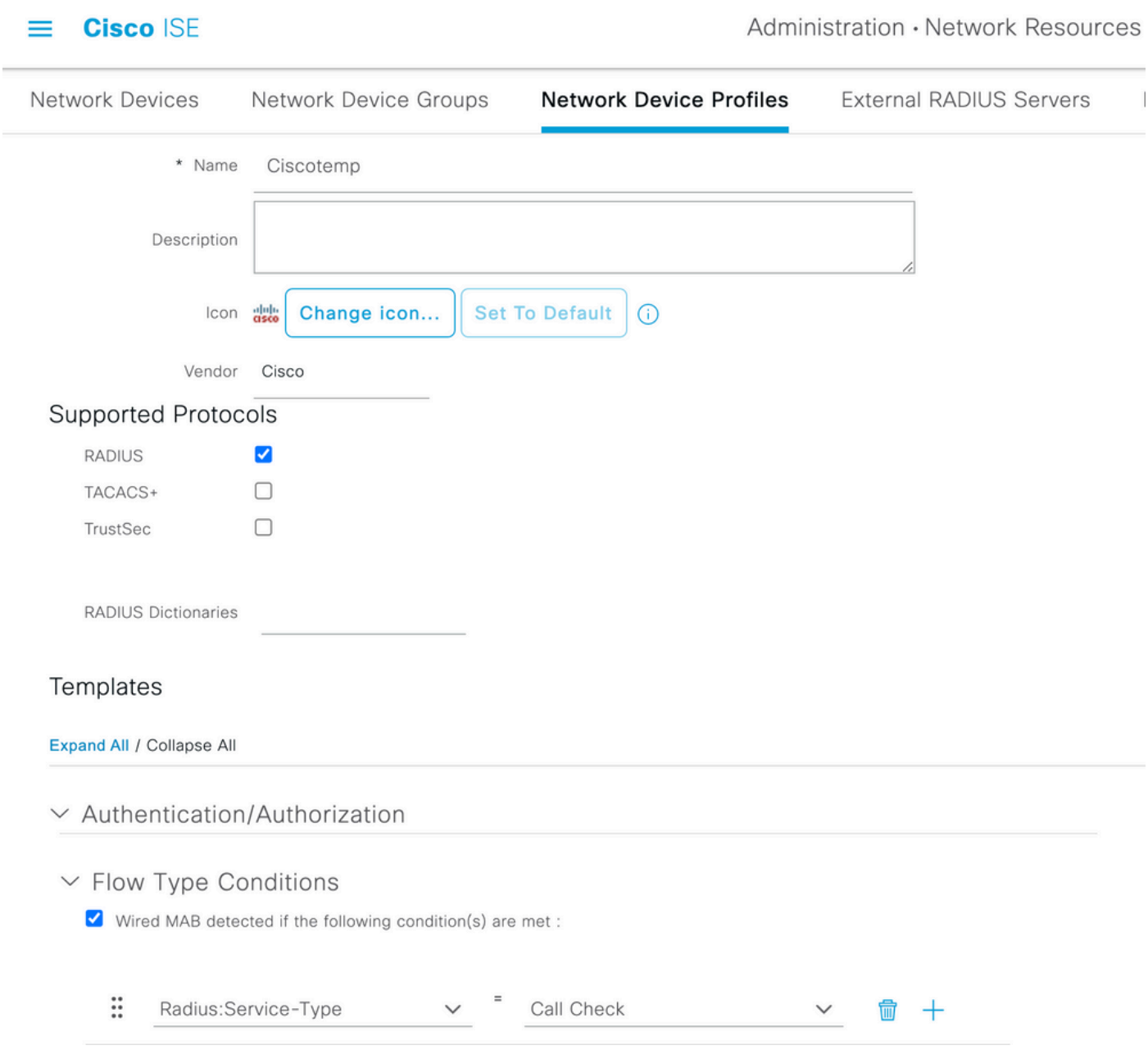
1. 將WLC配置為Cisco ISE上的AAA客戶端。
2. 將AP MAC地址新增到思科ISE上的資料庫。

但是，您可以將AP MAC地址新增為終端（最佳方法）或使用者（其密碼也是MAC地址），但這要求您降低密碼安全策略要求。

由於WLC不傳送NAS-Port-Type屬性(該屬性是ISE匹配Mac地址身份驗證(MAB)工作流程的要求)，因此需要對其進行調整。

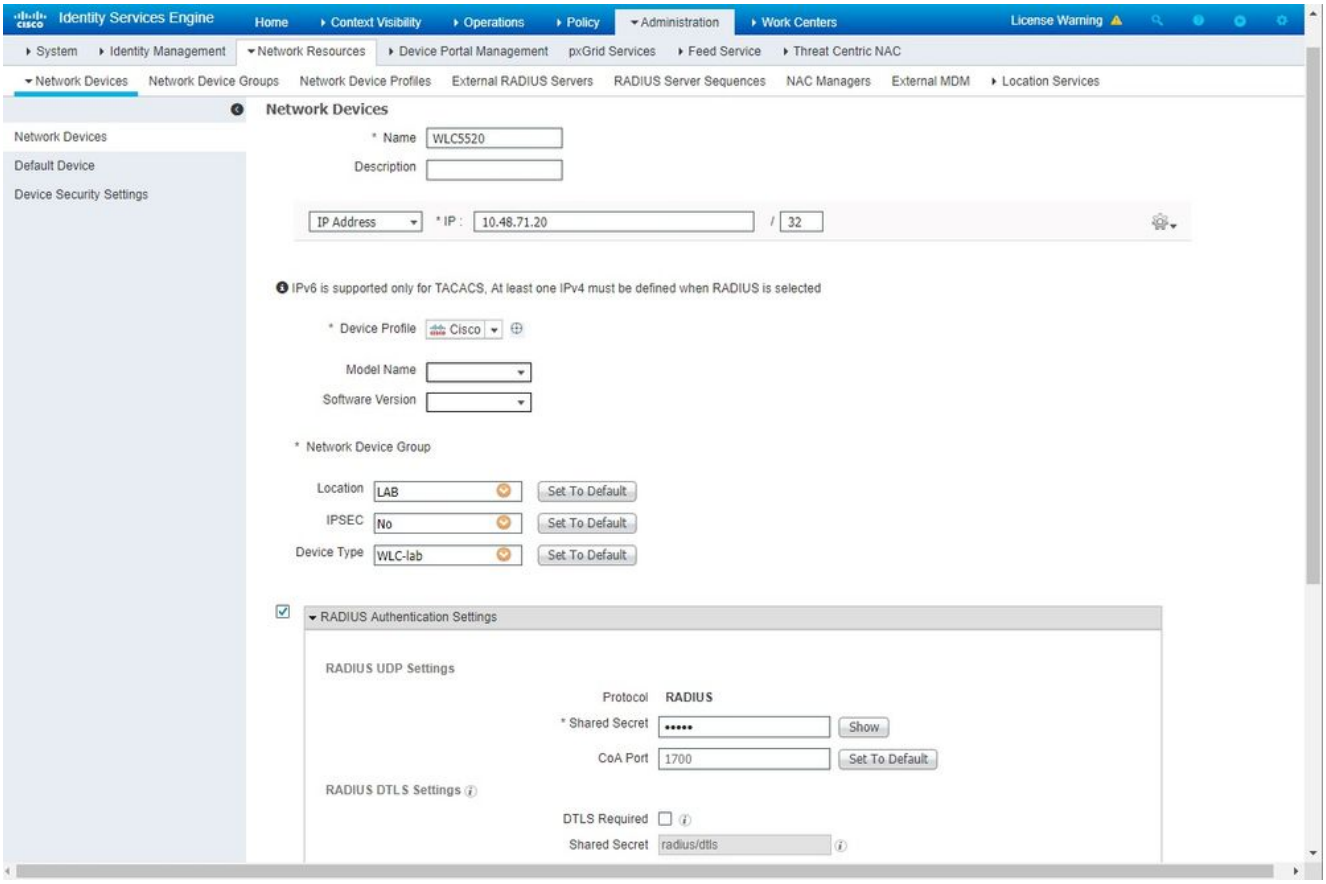
配置MAB不需要NAS埠型別屬性的新裝置配置檔案

導航至 **Administration > Network device profile** 並建立新的裝置配置檔案。啟用RADIUS並將有線MAB流設定為需要service-type=Call-check，如圖所示。您可以從傳統思科配置檔案複製其他設定，但我們的想法是不需要「Nas-port-type」屬性來實現有線MAB工作流程。



將WLC配置為Cisco ISE上的AAA客戶端

1. 轉到 **Administration > Network Resources > Network Devices > Add.**系統將顯示New Network Device頁面。
2. 在此頁面上，定義WLC **Name**，管理介面 **IP Address** 和 **Radius Authentications Settings** 喜歡 **Shared Secret.**如果您計畫輸入AP MAC地址作為終端，請確保使用之前配置的自定義裝置配置檔案，而不是預設的Cisco配置檔案！



3. 按一下 **Submit**.

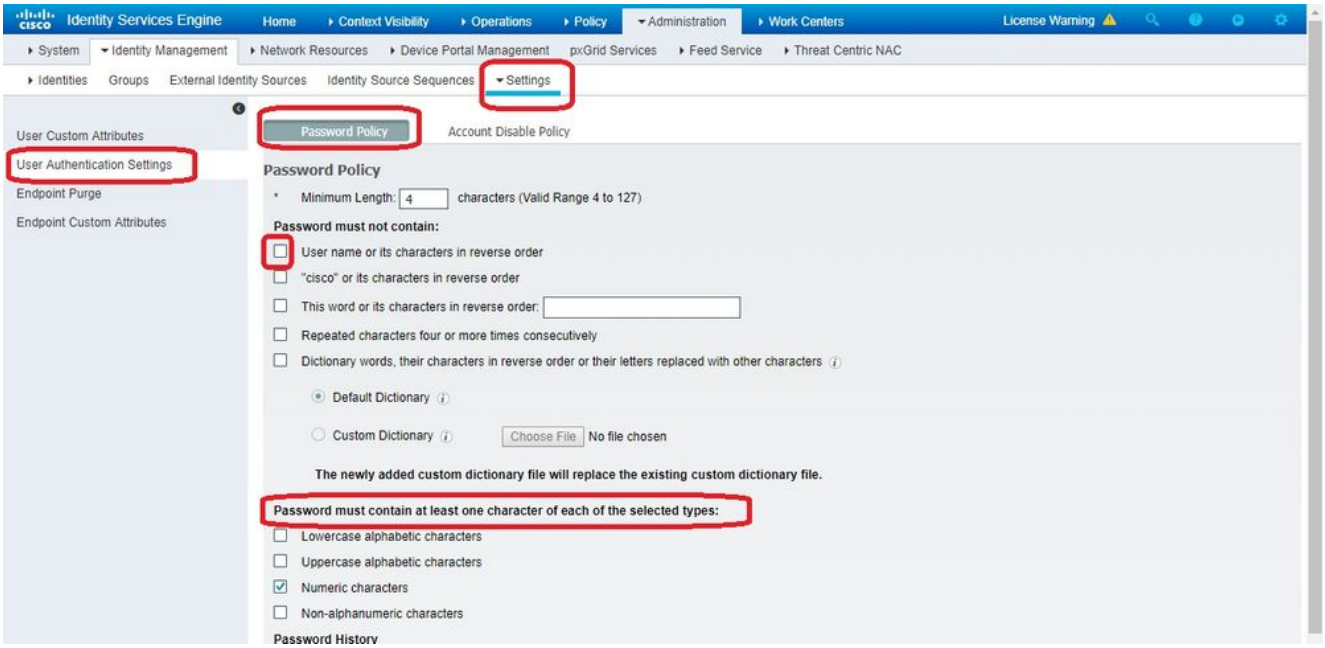
將AP MAC地址新增到思科ISE上的終端資料庫

導航至 **Administration > Identity Management > Identities** 並將MAC地址新增到終端資料庫。

將AP MAC地址新增到思科ISE上的使用者資料庫（可選）

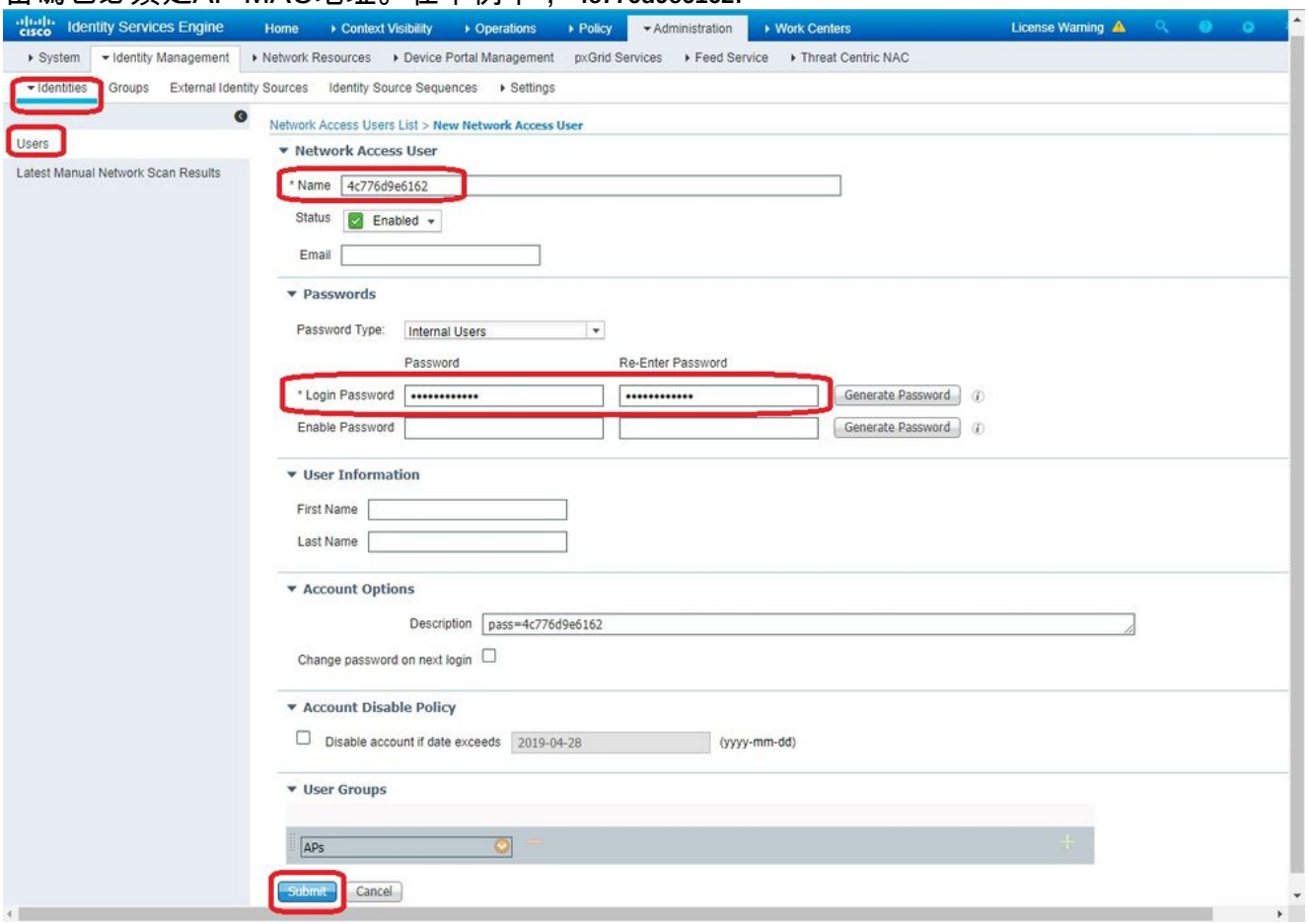
如果您不想修改有線MAB配置檔案並選擇將AP MAC地址作為使用者放置，則必須降低密碼策略要求。

1. 導航至 **Administration > Identity Management**.在這裡，我們需要確保密碼策略允許將使用者名稱用作密碼，並且策略還必須允許使用mac地址字元，而不再需要不同型別的字元。導航至 **Settings > User Authentication Settings > Password Policy**：



2. 然後導航至 **Identities > Users** 然後按一下 **Add**.顯示「使用者設定」頁面時，定義此AP的使用者名稱和密碼，如下所示。

提示：使用 **Description** 用於輸入密碼的欄位，以便以後輕鬆了解密碼的定義是什麼。密碼也必須是AP MAC地址。在本例中， **4c776d9e6162**.

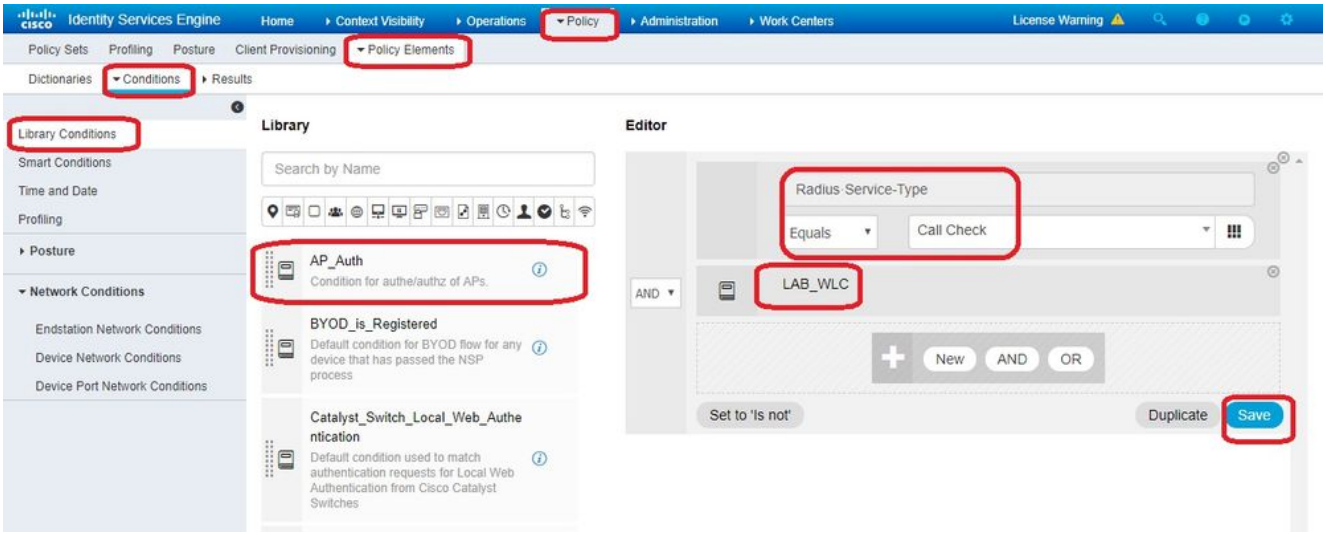


3. 按一下 **Submit**.

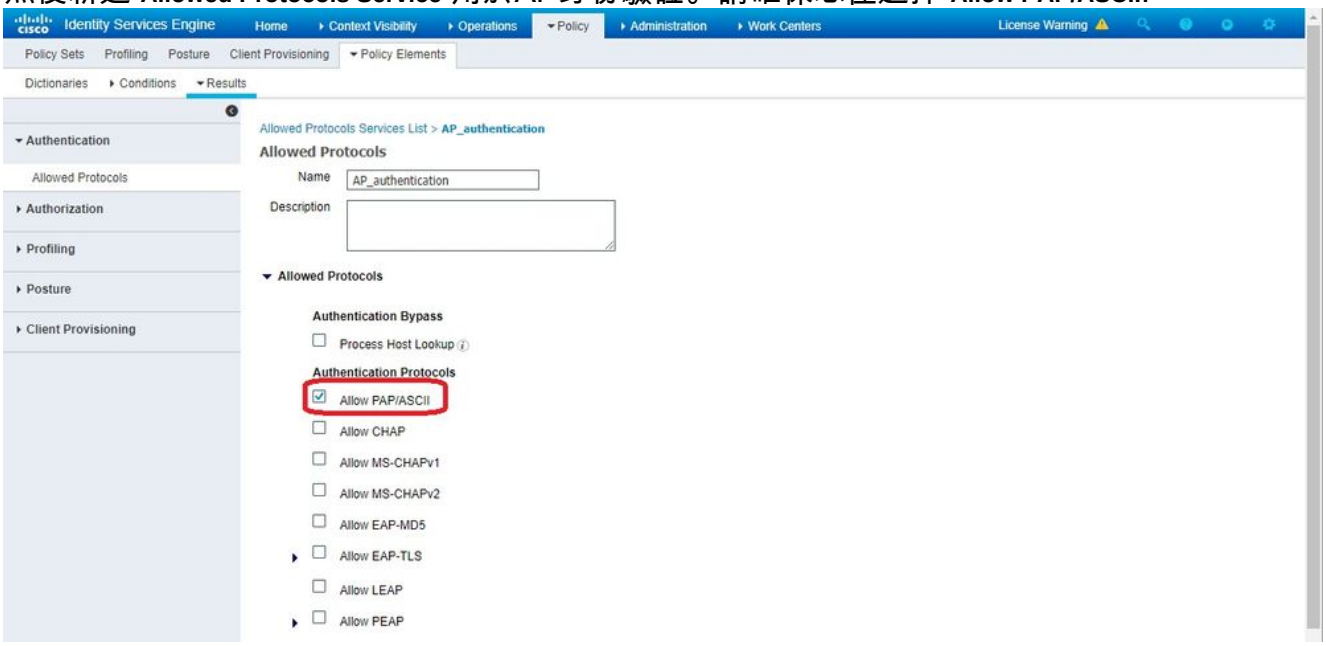
定義策略集

1. 您需要定義 **Policy Set** 以匹配來自WLC的驗證請求。首先，通過導航到 **Policy > Policy Elements > Conditions**，並建立新的條件以匹配WLC位置，在本例中為「

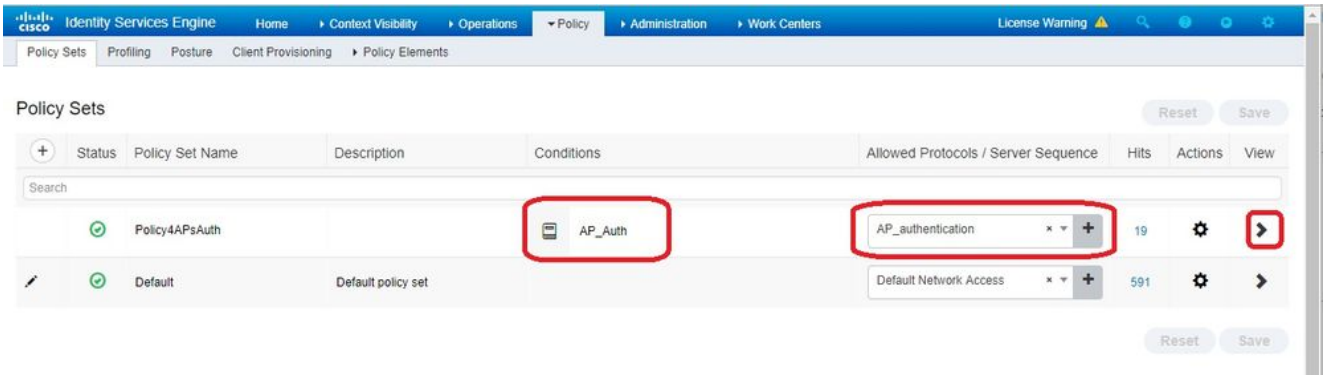
LAB_WLC」和 **Radius:Service-Type Equals Call Check** 用於Mac身份驗證。此處的條件名為「AP_Auth」。

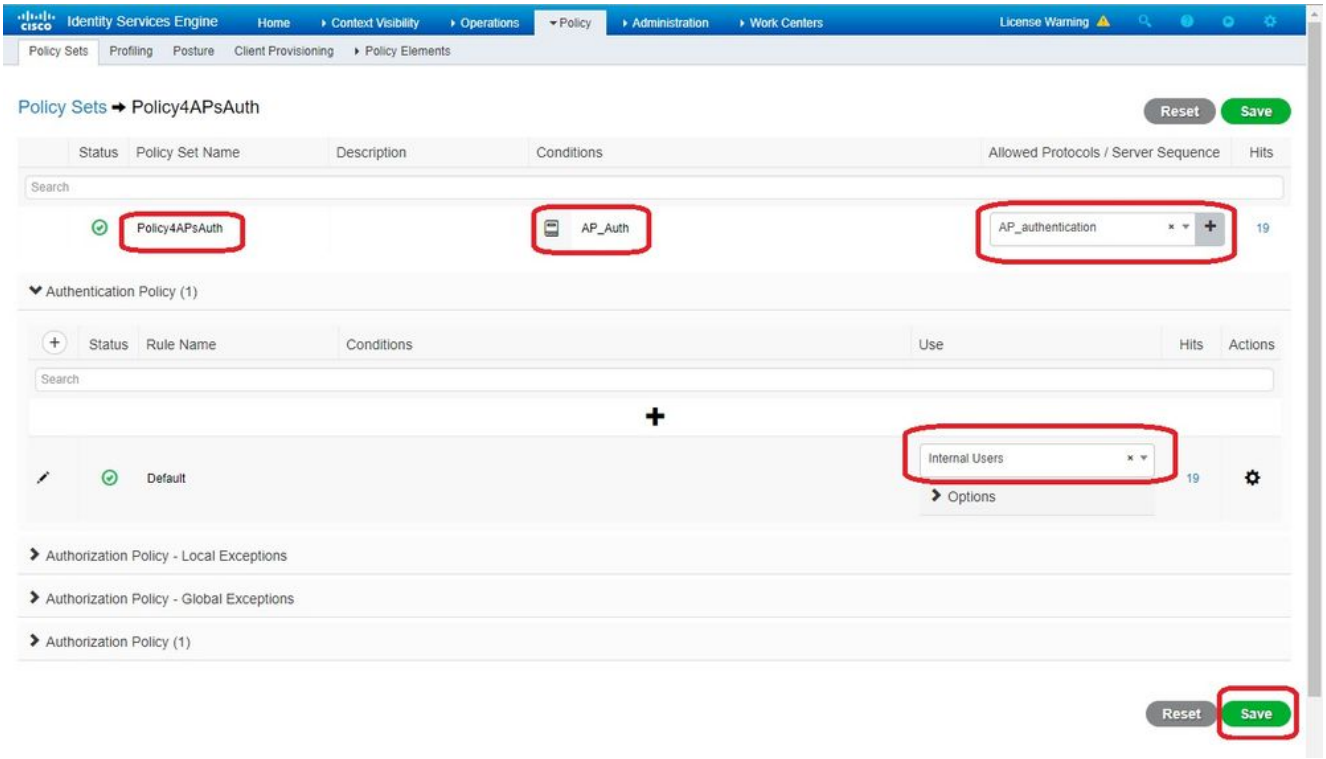


2. 按一下 **Save**.
3. 然後新建 **Allowed Protocols Service** 用於AP身份驗證。請確保您僅選擇 **Allow PAP/ASCII**:



4. 在 **Allowed Protocols/Server Sequence**.展開 **View** 和 **Authentication Policy > Use > Internal Users** 以便ISE在內部資料庫中搜尋AP的使用者名稱/密碼。





5. 按一下 **Save**.

驗證

為了驗證此配置，您需要將MAC地址為4c:77:6d:9e:61:62的AP連線到網路和監視器。使用 **debug capwap events/errors enable** 和 **debug aaa all enable** 命令。

從調試中可看出，WLC將AP MAC地址傳遞到RADIUS伺服器10.48.39.128，並且伺服器已成功驗證AP。然後AP向控制器註冊。

附註：由於空間限制，輸出中的某些行已移動到第二行。

```
*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Join Request from 192.168.79.151:5248

*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 using already alloced index 437
*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Unable to get Ap mode in Join request

*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Allocate database entry for AP
192.168.79.151:5248, already allocated index 437

*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 AP Allocate request at index 437 (reserved)
*spamApTask4: Feb 27 14:58:07.566: 24:7e:12:19:41:ef Deleting AP entry 192.168.79.151:5248 from
temporary database.
*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 AP group received default-group is found in
ap group configured in wlc.

*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Dropping request or response packet to AP
:192.168.79.151 (5248) by Controller: 10.48.71.20 (5246), message Capwap_wtp_event_response,
state Capwap_no_state

*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Message type Capwap_wtp_event_response is
not allowed to send in state Capwap_no_state for AP 192.168.79.151

*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 In AAA state 'Idle' for AP
```

70:69:5a:51:4e:c0
*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Join Request failed!

*spamApTask4: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 State machine handler: Failed to process msg type = 3 state = 0 from 192.168.79.151:5248

*spamApTask4: Feb 27 14:58:07.566: 24:7e:12:19:41:ef Failed to parse CAPWAP packet from 192.168.79.151:5248

*aaaQueueReader: Feb 27 14:58:07.566: **70:69:5a:51:4e:c0 Normal Response code for AAA Authentication : -9**
*aaaQueueReader: Feb 27 14:58:07.566: ReProcessAuthentication previous proto 8, next proto 40000001
*aaaQueueReader: Feb 27 14:58:07.566: AuthenticationRequest: 0x7f01b404f0f8

*aaaQueueReader: Feb 27 14:58:07.566: Callback.....0xd6cef02166

*aaaQueueReader: Feb 27 14:58:07.566: protocolType.....0x40000001

*aaaQueueReader: Feb 27 14:58:07.566: proxyState.....70:69:5A:51:4E:C0-00:00

*aaaQueueReader: Feb 27 14:58:07.566: Packet contains 9 AVPs:

*aaaQueueReader: Feb 27 14:58:07.566: AVP[02] Called-Station-Id.....70:69:5a:51:4e:c0 (17 bytes)

*aaaQueueReader: Feb 27 14:58:07.566: AVP[03] Calling-Station-Id.....4c:77:6d:9e:61:62 (17 bytes)

*aaaQueueReader: Feb 27 14:58:07.566: AVP[04] Nas-Port.....0x00000001 (1) (4 bytes)

*aaaQueueReader: Feb 27 14:58:07.566: AVP[05] Nas-Ip-Address.....0x0a304714 (170936084) (4 bytes)

*aaaQueueReader: Feb 27 14:58:07.566: AVP[06] NAS-Identifier.....0x6e6f (28271) (2 bytes)

*aaaQueueReader: Feb 27 14:58:07.566: AVP[08] Service-Type.....0x0000000a (10) (4 bytes)

*aaaQueueReader: Feb 27 14:58:07.566: AVP[09] Message-Authenticator.....DATA (16 bytes)

*aaaQueueReader: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 radiusServerFallbackPassiveStateUpdate: **RADIUS server is ready 10.48.39.128 port 1812** index 1 active 1
*aaaQueueReader: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 NAI-Realm not enabled on Wlan, radius servers will be selected as usual
*aaaQueueReader: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Found the radius server : 10.48.39.128 from the global server list
*aaaQueueReader: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Send Radius Auth Request with pktId:185 into qid:0 of server at index:1
*aaaQueueReader: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 Sending the packet to v4 host 10.48.39.128:1812 of length 130
*aaaQueueReader: Feb 27 14:58:07.566: 70:69:5a:51:4e:c0 **Successful transmission of Authentication Packet (pktId 185) to 10.48.39.128:1812** from server queue 0, proxy state 70:69:5a:51:4e:c0-00:00
*aaaQueueReader: Feb 27 14:58:07.566: 00000000: 01 b9 00 82 d9 c2 ef 27 f1 bb e4 9f a8 88 5a 6d ....'......Zm
*aaaQueueReader: Feb 27 14:58:07.566: 00000010: 4b 38 1a a6 01 0e 34 63 37 37 36 64 39 65 36 31 K8....4c776d9e61
*aaaQueueReader: Feb 27 14:58:07.566: 00000020: 36 32 1e 13 37 30 3a 36 39 3a 35 61 3a 35 31 3a

62..70:69:5a:51:
*aaaQueueReader: Feb 27 14:58:07.566: 00000030: 34 65 3a 63 30 1f 13 34 63 3a 37 37 3a 36 64 3a
4e:c0..4c:77:6d:
*aaaQueueReader: Feb 27 14:58:07.566: 00000040: 39 65 3a 36 31 3a 36 32 05 06 00 00 00 01 04 06
9e:61:62........
*aaaQueueReader: Feb 27 14:58:07.566: 00000050: 0a 30 47 14 20 04 6e 6f 02 12 54 46 96 61 2a 38
.0G...no..TF.a*8
*aaaQueueReader: Feb 27 14:58:07.566: 00000060: 5a 57 22 5b 41 c8 13 61 97 6c 06 06 00 00 00 0a
ZW"[A..a.l......
*aaaQueueReader: Feb 27 14:58:07.566: 00000080: 15 f9 ..
*aaaQueueReader: Feb 27 14:58:07.566: **70:69:5a:51:4e:c0 User entry not found in the Local FileDB for the client.**
*radiusTransportThread: Feb 27 14:58:07.587: Vendor Specif Radius Attribute(code=26, avp_len=28, vId=9)
*radiusTransportThread: Feb 27 14:58:07.588: 70:69:5a:51:4e:c0 *** Counted VSA 150994944 AVP of length 28, code 1 atrlen 22)
*radiusTransportThread: Feb 27 14:58:07.588: Vendor Specif Radius Attribute(code=26, avp_len=28, vId=9)
*radiusTransportThread: Feb 27 14:58:07.588: 70:69:5a:51:4e:c0 AVP: VendorId: 9, vendorType: 1, vendorLen: 22

*radiusTransportThread: Feb 27 14:58:07.588: 00000000: 70 72 6f 66 69 6c 65 2d 6e 61 6d 65 3d 55 6e 6b profile-name=Unk
*radiusTransportThread: Feb 27 14:58:07.588: 00000010: 6e 6f 77 6e nown
*radiusTransportThread: Feb 27 14:58:07.588: 70:69:5a:51:4e:c0 Processed VSA 9, type 1, raw bytes 22, copied 0 bytes
*radiusTransportThread: Feb 27 14:58:07.588: **70:69:5a:51:4e:c0 Access-Accept received from RADIUS server 10.48.39.128** (qid:0) with port:1812, pktId:185
*radiusTransportThread: Feb 27 14:58:07.588: RadiusIndexSet(1), Index(1)
*radiusTransportThread: Feb 27 14:58:07.588: structureSize.............................432

*radiusTransportThread: Feb 27 14:58:07.588: protocolUsed.............................0x00000001

*radiusTransportThread: Feb 27 14:58:07.588: proxyState.................................70:69:5A:51:4E:C0-00:00

*radiusTransportThread: Feb 27 14:58:07.588: Packet contains 4 AVPs:

*radiusTransportThread: Feb 27 14:58:07.588: **AVP[01] User-Name.............................4c776d9e6162** (12 bytes)

*radiusTransportThread: Feb 27 14:58:07.588: AVP[02] State.................................ReauthSession:0a302780bNEx79SKIFosJ2ioAmIYNOiRe2iDSY3drcFsHuYpChs (65 bytes)

*radiusTransportThread: Feb 27 14:58:07.588: AVP[03] Class.................................DATA (83 bytes)

*radiusTransportThread: Feb 27 14:58:07.588: AVP[04] Message-Authenticator...................DATA (16 bytes)

*spamApTask0: Feb 27 14:58:07.588: 70:69:5a:51:4e:c0 Join Version: = 134770432

*spamApTask0: Feb 27 14:58:07.588: 00:00:00:00:00:00 apType = 54 apModel: AIR-AP4800-E-K

*spamApTask0: Feb 27 14:58:07.588: 00:00:00:00:00:00 apType: Ox36 bundleApImageVer: 8.8.111.0
*spamApTask0: Feb 27 14:58:07.588: 00:00:00:00:00:00 version:8 release:8 maint:111 build:0
*spamApTask0: Feb 27 14:58:07.588: 70:69:5a:51:4e:c0 Join resp: CAPWAP Maximum Msg element len = 79

*spamApTask0: Feb 27 14:58:07.588: 70:69:5a:51:4e:c0 Join Response sent to 0.0.0.0:5248

*spamApTask0: Feb 27 14:58:07.588: **70:69:5a:51:4e:c0 CAPWAP State: Join**

疑難排解

使用以下命令對組態進行疑難排解：

- debug capwap events enable — 配置LWAPP事件的調試
- debug capwap packet enable — 配置LWAPP資料包跟蹤的調試
- debug capwap errors enable — 配置LWAPP資料包錯誤的調試
- debug aaa all enable — 配置所有AAA消息的調試

如果RADIUS即時中的ISE報告在您對ISE授權AP時記錄使用者名稱「INVALID」，這意味著身份驗證正在針對終端資料庫進行驗證，並且您未按照本文檔中的說明修改有線MAB配置檔案。如果MAC地址身份驗證與有線/無線MAB配置檔案不匹配，則ISE認為MAC地址身份驗證無效，該配置檔案預設需要WLC未傳送的NAS埠型別屬性。

關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。