Configuring Local Authentication Using LDAP

This chapter provides information about configuring local authentication for Cisco Identity Based Networking Services.

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Local Authentication Using LDAP

Local authentication using Lightweight Directory Access Protocol (LDAP) allows an endpoint to be authenticated using 802.1X, MAC authentication bypass (MAB), or web authentication with LDAP as a backend. Local authentication in Identity-Based Networking Services also supports associating an authentication, authorization, and accounting (AAA) attribute list with the local username for wireless sessions.

Configuring Local Authentication Using LDAP

Perform this task to specify the AAA method list for local authentication and to associate an attribute list with a local username.

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.

	Command or Action	Purpose
Step 3	**aaa new-model** **Example:** `Device(config)# aaa new-model`	Enables the authentication, authorization, and accounting (AAA) access control model.
Step 4	**aaa local authentication** {*method-list-name* | **default**} **authorization** {*method-list-name* | **default**} **Example:** `Device(config)# aaa local authentication default authorization default`	Specifies the method lists to use for local authentication and authorization from a LDAP server.
Step 5	**username** *name* **aaa attribute list** *aaa-attribute-list* [**password** *password*] **Example:** `Device(config)# username USER_1 aaa attribute list LOCAL_LIST password CISCO`	Associates a AAA attribute list with a local username.
Step 6	**exit** **Example:** `Device(config)# exit`	Exits global configuration mode and returns to privileged EXEC mode.

Configuring MAC Filtering Support

Perform this task to set the RADIUS compatibility mode, the MAC delimiter, and the MAC address as the username to support MAC filtering.

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**aaa new-model** **Example:** `Device(config)# aaa new-model`	Enables the authentication, authorization, and accounting (AAA) access control model.
Step 4	**aaa group server radius** *group-name* **Example:**	Groups different RADIUS server hosts into distinct lists.

	Command or Action	Purpose
	`Device(config)# aaa group server radius RAD_GROUP1`	
Step 5	**subscriber mac-filtering security-mode** {**mac** | **none** | **shared-secret**} **Example:** `Device(config-sg-radius)# subscriber mac-filtering security-mode mac`	Specifies the RADIUS compatibility mode for MAC filtering. • The default value is **none**.
Step 6	**mac-delimiter** {**colon** | **hyphen** | **none** | **single-hyphen**} **Example:** `Device(config-sg-radius)# mac-delimiter hyphen`	Specifies the MAC delimiter for RADIUS compatibility mode. • The default value is **none**.
Step 7	**exit** **Example:** `Device(config-sg-radius)# exit`	Exits server group configuration mode and returns to global configuration mode.
Step 8	**username** *mac-address* **mac** [**aaa attribute list** *aaa-attribute-list*] **Example:** `Device(config)# username 00-22-WP-EC-23-3C mac aaa attribute list AAA_list1`	Allows a MAC address to be used as the username for MAC filtering done locally.
Step 9	**exit** **Example:** `Device(config)# exit`	Exits global configuration mode and returns to privileged EXEC mode.

Example: Configuring Local Authentication Using LDAP

The following example shows a configuration for local authentication:

```
!
username USER_1 password 0 CISCO
username USER_1 aaa attribute list LOCAL_LIST
aaa new-model
aaa local authentication EAP_LIST authorization EAP_LIST
!
```

Example: Configuring MAC Filtering Support

The following example shows a configuration for MAC filtering:

```
username 00-22-WP-EC-23-3C mac aaa attribute list AAA_list1
!
aaa new-model
aaa group server radius RAD_GROUP1
subscriber mac-filtering security-mode mac
mac-delimiter hyphen
```

Feature History for Local Authentication Using LDAP

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

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

Table 1: Feature History for Local Authentication Using LDAP

Release	Feature Name	Feature Information
Cisco IOS XE Fuji 16.9.2	Local Authentication Using LDAP	Introduces support for local authentication using Lightweight Directory Access Protocol (LDAP).
Cisco IOS XE Cupertino 17.9.1	Local Authentication Using LDAP	This feature was implemented on the C9200CX-12P-2X2G, C9200CX-8P-2X2G, and C9200CX-12T-2X2G models.

Use the Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com.