Configuring WLAN Security

Configuring WLAN Security (CLI)

Configuring Static WEP Layer 2 Security Parameters (CLI)

Before you begin

You must have administrator privileges.

SUMMARY STEPS

1. **configure terminal**
2. **wlan** *profile-name*
3. **security static-wep-key** [**authentication** {**open** | **shared**} | **encryption** {**104** | **40**} {**ascii** | **hex**} [**0** | **8**]]
4. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 2	**wlan** *profile-name* **Example:** `# wlan test4`	Enters WLAN configuration submode. The *profile-name* is the profile name of the configured WLAN.
Step 3	**security static-wep-key** [**authentication** {**open**	**shared**}	**encryption** {**104**	**40**} {**ascii**	**hex**} [**0**	**8**]]	The keywords are as follows:

	Command or Action	Purpose
	Example: `(config-wlan)# security static-wep-key authentication open`	• **static-wep-key**—Configures Static WEP Key authentication. • **authentication**—Specifies the authentication type you can set. The values are open and shared. • **encryption**—Specifies the encryption type that you can set. The valid values are 104 and 40. 40-bit keys must contain 5 ASCII text characters or 10 hexadecimal characters. 104-bit keys must contain 13 ASCII text characters or 26 hexadecimal characters. • **ascii**—Specifies the key format as ASCII. • **hex**—Specifies the key format as HEX.
Step 4	**end** **Example:** `Device(config)# end`	Returns to privileged EXEC mode. Alternatively, you can also press **Ctrl-Z** to exit global configuration mode.

Configuring WPA + WPA2 Layer 2 Security Parameters (CLI)

Note The default security policy is WPA2.

Before you begin

You must have administrator privileges.

SUMMARY STEPS

1. **configure terminal**
2. **wlan** *profile-name*
3. **security wpa**
4. **security wpa wpa1**
5. **security wpa wpa1 ciphers** [**aes** | **tkip**]
6. **security wpa wpa2**
7. **security wpa wpa2 ciphers** [**aes** | **tkip**]

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.

	Command or Action	Purpose
Step 2	**wlan** *profile-name* **Example:** `# wlan test4`	Enters WLAN configuration submode. The *profile-name* is the profile name of the configured WLAN.
Step 3	**security wpa** **Example:** `(config-wlan)# security wpa`	Enables WPA.
Step 4	**security wpa wpa1** **Example:** `(config-wlan)# security wpa wpa1`	Enables WPA1.
Step 5	**security wpa wpa1 ciphers** [**aes** | **tkip**] **Example:** `(config-wlan)# security wpa wpa1 ciphers aes`	Specifies the WPA1 cipher. Choose one of the following encryption types: • **aes**—Specifies WPA/AES support. • **tkip**—Specifies WPA/TKIP support.
Step 6	**security wpa wpa2** **Example:** `(config-wlan)# security wpa wpa2`	Enables WPA2.

Step 7	**security wpa wpa2 ciphers** [**aes** | **tkip**]
	Example:
	`(config-wlan)# security wpa wpa2`
	Example:
	`(config-wlan)# security wpa wpa2 ciphers tkip`
		Configure WPA2 cipher. Choose one of the following encryption types:
		• **aes**—Specifies WPA/AES support.
		• **tkip**—Specifies WPA/TKIP support.

Configuring WLAN Security (GUI)

Configuring Static WEP Layer 2 Security Parameters (GUI)

Step 1 Choose **Configuration** > **Tags & Profiles** > **WLANs**.

Step 2 On the **WLANs** page, click the name of the WLAN.

Step 3 In the **Edit WLAN** window, click the **Security** tab.

Step 4 From the **Layer 2 Security Mode** drop-down list, select the **Static WEP** option.

Step 5 (Optional) Check the **Shared Key Authentication** check box to set the authentication type as shared. By leaving the check box unchecked, the authentication type is set to open.

Step 6 Set the **Key Size** as either **40 bits** or **104 bits**.

- 40 bits: The keys with 40-bit encryption must contain 5 ASCII text characters or 10 hexadecimal characters.

- 104 bits: The keys with 104-bit encryption must contain 13 ASCII text characters or 26 hexadecimal characters.

Step 7 Set the appropriate **Key Index**; you can choose between 1 to 4.

Step 8 Set the **Key Format** as either **ASCII** or **Hex**.

Step 9 Enter a valid **Encryption Key**.

- 40 bits: The keys with 40-bit encryption must contain 5 ASCII text characters or 10 hexadecimal characters.
- 104 bits: The keys with 104-bit encryption must contain 13 ASCII text characters or 26 hexadecimal characters.

Step 10 Click **Update & Apply to Device**.

Configuring WPA + WPA2 Layer 2 Security Parameters (GUI)

Step 1 Click **Configuration** > **Tags and Profiles** > **WLANs**.

Step 2 Click **Add** to add a new WLAN Profile or click the one you want to edit.

Step 3 In the **Edit WLAN** window, click **Security** > **Layer2**.

Step 4 From **Layer 2 Security Mode** drop-down menu, select **WPA + WPA2**.

Step 5 Configure the security parameters and then click **Save and Apply to Device**.