

Configure SSID-to-VLAN Mapping on a Wireless Access Point

Objective

A Virtual Local Area Network (VLAN) is a switched network that is logically segmented by function, area, or application without regard to the physical locations of the users. VLANs are a group of hosts or ports that can be located anywhere in a network but communicate as if they are on the same physical segment. VLANs help to simplify network management by letting you move a device to a new VLAN without changing any physical connections.

A tagged VLAN between a trunk port and a switch port contains the VLAN information in the Ethernet frame. An untagged VLAN sends traffic without the VLAN tag. A VLAN tag inserts information into Ethernet frames identifying which frame belongs to which VLAN. A trunk port is a port that handles multiple VLANs.

The Service Set Identifier (SSID) is a unique identifier that wireless clients can connect to or share among all devices in a wireless network. It is case-sensitive and must not exceed 32 alphanumeric characters.

The SSID Broadcast feature allows the SSID to be broadcasted on the network. This feature is enabled by default to make the network discoverable by wireless devices.

This article provides instructions on how to configure SSID-to-VLAN mapping on wireless access points.

Applicable Devices

- WAP100 Series
- WAP300 Series
- WAP500 Series

Software Version

- 1.0.2.2 – WAP131, WAP351
- 1.0.6.2 – WAP121, WAP321
- 1.2.1.3 – WAP371, WAP551, WAP561
- 1.0.1.7 – WAP150, WAP361
- 1.0.0.17 – WAP571, WAP571E

Configure SSID-to-VLAN Mapping

Using the Setup Wizard


Step 1. Run the setup wizard from the main dashboard of the access point web-based utility.

Access Point Setup Wizard

Welcome

Welcome

Thank you for choosing Cisco Wireless Access Point. This setup wizard will help you install your Access Point.



Note: This Setup Wizard provides simplified options to help you quickly get your access point up and running. If there is any option or capability that you do not see while running the setup wizard, click the learning link provided on many of the setup wizard pages.

Click **Next** to continue

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Step 2. Provide the configuration details required by the setup wizard.

Step 3. In the *Network Name (SSID)* field, under Configure Radio 1 screen for the 2.4 GHz network, enter your preferred SSID. The default is ciscosb_2.4GHz. Click **Next**.

Configure Radio 1 - Name Your Wireless Network

The name of your wireless network, known as an SSID, identifies your network so that wireless devices can find it.

Enter a name for your wireless network:

Network Name (SSID):
For example: MyNetwork

[? Learn more about network names](#)

Click **Next** to continue

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Step 4. Choose the security type for your wireless network.

Note: For this example, Best Security (WPA2 Personal – AES) is chosen.

Configure Radio 1 - Secure Your Wireless Network

Select your network security strength.

Best Security (WPA2 Personal - AES)

Recommended for new wireless computers and devices that support this option.
Older wireless devices might not support this option.

Better Security (WPA/WPA2 Personal - TKIP/AES)

Recommended for older wireless computers and devices that might not support WPA2.

No Security (Not recommended)

Enter a security key with 8-63 characters.

Below Minimum

Show Key as Clear Text

[? Learn more about your network security options](#)

Click **Next** to continue

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Step 5. Enter a security key or password that is 8-63 characters long. Click **Next** to continue.

Configure Radio 1 - Secure Your Wireless Network

Select your network security strength.

- Best Security (WPA2 Personal - AES)
Recommended for new wireless computers and devices that support this option.
Older wireless devices might not support this option.
- Better Security (WPA/WPA2 Personal - TKIP/AES)
Recommended for older wireless computers and devices that might not support WPA2.
- No Security (Not recommended)

Enter a security key with 8-63 characters.

Below Minimum

Show Key as Clear Text

[? Learn more about your network security options](#)

Click **Next** to continue

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Step 6. In the *VLAN ID* field, enter the VLAN ID for your wireless network and click **Next**.

Note: In this example, 10 is used as the VLAN ID.

Configure Radio 1 - Assign The VLAN ID For Your Wireless Network

By default, the VLAN ID assigned to the management interface for your access point is 1, which is also the default untagged VLAN ID. If the management VLAN ID is the same as the VLAN ID assigned to your wireless network, then the wireless clients associated with this specific wireless network can administer this device. If needed, an access control list (ACL) can be created to disable administration from wireless clients.

Enter a VLAN ID for your wireless network:

VLAN ID: (Range: 1 - 4094)

[? Learn more about vlan ids](#)

Click **Next** to continue

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Step 7. In the Configure Radio 2 page for the 5 GHz network, enter your preferred SSID in the *Network Name (SSID)* field and then click **Next**. The default is ciscosb_5GHz.

Note: This step applies only to WAPs with dual-radio.

Configure Radio 2 - Name Your Wireless Network

The name of your wireless network, known as an SSID, identifies your network so that wireless devices can find it.

Enter a name for your wireless network:

Network Name (SSID): For example: MyNetwork

[? Learn more about network names](#)

Click **Next** to continue

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Step 8. Choose the security type for your wireless network.

Note: In this example, Best Security (WPA2 Personal - AES) is chosen.

Configure Radio 2 - Secure Your Wireless Network

Select your network security strength.

Best Security (WPA2 Personal - AES)

Recommended for new wireless computers and devices that support this option.
Older wireless devices might not support this option.

Better Security (WPA/WPA2 Personal - TKIP/AES)

Recommended for older wireless computers and devices that might not support WPA2.

No Security (Not recommended)

Enter a security key with 8-63 characters.

Below Minimum

Show Key as Clear Text

[? Learn more about your network security options](#)

Click **Next** to continue

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Step 9. Enter a security key or password that is 8-63 characters long. Click **Next** to continue.

Configure Radio 2 - Secure Your Wireless Network

Select your network security strength.

Best Security (WPA2 Personal - AES)

Recommended for new wireless computers and devices that support this option.
Older wireless devices might not support this option.

Better Security (WPA/WPA2 Personal - TKIP/AES)

Recommended for older wireless computers and devices that might not support WPA2.

No Security (Not recommended)

Enter a security key with 8-63 characters.

Below Minimum

Show Key as Clear Text

Step 10. Enter the VLAN ID then click **Next**.

Note: For this example, 20 is used as VLAN ID.

Configure Radio 2 - Assign The VLAN ID For Your Wireless Network

By default, the VLAN ID assigned to the management interface for your access point is 1, which is also the default untagged VLAN ID. If the management VLAN ID is the same as the VLAN ID assigned to your wireless network, then the wireless clients associated with this specific wireless network can administer this device. If needed, an access control list (ACL) can be created to disable administration from wireless clients.

Enter a VLAN ID for your wireless network:

VLAN ID: (Range: 1 - 4094)

[? Learn more about vlan ids](#)

Click **Next** to continue

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Step 11. Click **Next** to skip the Captive Portal configuration.

Enable Captive Portal - Create Your Guest Network

Use Captive Portal to set up a guest network, which means that wireless users need to be authenticated before they can access the Internet. For example, a hotel can create a guest network to redirect new wireless users to a page for authentication.

Do you want to create your guest network now?

- Yes
- No, thanks.

[? Learn more about captive portal guest networks](#)

Click **Next** to continue

Step 12. Review and confirm your settings then click **Submit**.

Summary - Confirm Your Settings

Please review the following settings and ensure the data is correct.

Radio 1 (2.4 GHz)

Network Name (SSID):	ciscosb_2.4GHz
Network Security Type:	WPA2 Personal - AES
Security Key:	*****
VLAN ID:	10

Radio 2 (5 GHz)


Network Name (SSID):	ciscosb_5GHz
Network Security Type:	WPA2 Personal - AES
Security Key:	*****
VLAN ID:	20

Click **Submit** to enable settings on your Cisco Wireless Access Point

Step 13. Once the Device Setup Complete screen appears, click **Finish**.

Note: You will be logged out of the web-based utility page.

Device Setup Complete

 Congratulations, your access point has been set up successfully. We strongly recommend that you save these settings by writing them down or by copying and pasting them into a text document. You will need these settings later when you add other wireless computers or devices to your network.

Cluster Name:	Cisco001
Radio 1 (2.4 GHz)	
Network Name (SSID):	ciscosb_2.4GHz
Network Security Type:	WPA2 Personal - AES
Security Key:	password123
Radio 2 (5 GHz)	
Network Name (SSID):	ciscosb_5GHz
Network Security Type:	WPA2 Personal - AES
Security Key:	*****



Click **Finish** to close this wizard.

<input type="button" value="Back"/>	<input type="button" value="Finish"/>
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You have now successfully mapped an SSID to a VLAN on your access point.