

# **Configuring Access Point Groups**

- Finding Feature Information, on page 1
- Prerequisites for Configuring AP Groups, on page 1
- Restrictions for Configuring Access Point Groups, on page 2
- Information About Access Point Groups, on page 2
- How to Configure Access Point Groups, on page 3
- Additional References, on page 5
- Feature History and Information for Access Point Groups, on page 6

### **Finding Feature Information**

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the Feature Information Table at the end of this document.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

### Prerequisites for Configuring AP Groups

The following are the prerequisites for creating access point groups on a switch:

- The required access control list (ACL) must be defined on the router that serves the VLAN or subnet.
- Multicast traffic is supported with access point group VLANs. However, if the client roams from one access point to another, the client might stop receiving multicast traffic, unless IGMP snooping is enabled.

#### **Related Topics**

Information About Access Point Groups, on page 2 Restrictions for Configuring Access Point Groups, on page 2

### **Restrictions for Configuring Access Point Groups**

• Suppose that the interface mapping for a WLAN in the AP group table is the same as the WLAN interface. If the WLAN interface is changed, the interface mapping for the WLAN in the AP group table also changes to the new WLAN interface.

Suppose that the interface mapping for a WLAN in the AP group table is different from the one defined for the WLAN. If the WLAN interface is changed, then the interface mapping for the WLAN in the AP group table does not change to the new WLAN interface.

- If you clear the configuration on the switch, all of the access point groups disappear except for the default access point group "default-group," which is created automatically.
- The default access point group can have up to 16 WLANs associated with it. The WLAN IDs for the default access point group must be less than or equal to 16. If a WLAN with an ID greater than 16 is created in the default access point group, the WLAN SSID will not be broadcasted. All WLAN IDs in the default access point group must have an ID that is less than or equal to 16. WLANs with IDs greater than 16 can be assigned to custom access point groups.
- We recommend that you configure all Flex+Bridge APs in a mesh tree (in the same sector) in the same AP group and the same FlexConnect group, to inherit the WLAN-VLAN mappings properly.

#### **Related Topics**

Information About Access Point Groups, on page 2 Prerequisites for Configuring AP Groups, on page 1

## **Information About Access Point Groups**

After you create up to 512 WLANs on the switch, you can selectively publish them (using access point groups) to different access points to better manage your wireless network. In a typical deployment, all users on a WLAN are mapped to a single interface on the switch. Therefore, all users that are associated with that WLAN are on the same subnet or VLAN. However, you can choose to distribute the load among several interfaces or to a group of users based on specific criteria such as individual departments (such as Marketing) by creating access point groups. Additionally, these access point groups can be configured in separate VLANs to simplify network administration.

#### **Related Topics**

Creating Access Point Groups, on page 3 Viewing Access Point Group, on page 4 Assigning an Access Point to an AP Group, on page 4 Prerequisites for Configuring AP Groups, on page 1 Restrictions for Configuring Access Point Groups, on page 2

## **How to Configure Access Point Groups**

### **Creating Access Point Groups**

#### Before you begin

You must have administrator privileges to perform this operation.

#### **SUMMARY STEPS**

- 1. configure terminal
- 2. ap group ap-group-name
- **3.** wlan wlan-name
- 4. (Optional) vlan vlan-name
- 5. end

#### **DETAILED STEPS**

	Command or Action	Purpose	
Step 1	configure terminal	Enters global configuration mode.	
	Example:		
	Switch# configure terminal		
Step 2	ap group ap-group-name	Creates an access point group.	
	Example:		
	Switch(config)# <b>ap group my-ap-group</b>		
Step 3	wlan wlan-name	Associates the AP group to a WLAN.	
	Example:		
	Switch(config-apgroup)# wlan wlan-name		
Step 4	(Optional) vlan vlan-name	Assigns the access point group to a VLAN.	
	Example:		
	Switch(config-apgroup)# <b>vlan test-vlan</b>		
Step 5	end	Returns to privileged EXEC mode. Alternatively, you can also press <b>Ctrl-Z</b> to exit global configuration mode.	
	Example:		
	Switch(config)# <b>end</b>		

#### Example

This example shows how to create an AP group:

```
Switch# configure terminal
Switch(config-apgroup)# ap group test-ap-group-16
Switch(config-wlan-apgroup)# wlan test-ap-group-16
Switch(config-wlan-apgroup)# vlan VLAN1300
```

#### **Related Topics**

Information About Access Point Groups, on page 2

### Assigning an Access Point to an AP Group

#### Before you begin

You must have administrator privileges to perform this operation.

#### **SUMMARY STEPS**

1. ap name ap-name ap-group-name ap-group

#### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	ap name ap-name ap-group-name ap-group Example: Switch# ap name 1240-101 ap-groupname apgroup_16	<ul> <li>Assigns the access point to the access point group. The keywords and arguments are as follows:</li> <li>name—Specifies that the argument following this keyword is the name of an AP that is associated to the switch.</li> <li><i>ap-name</i>—AP that you want to associate to the AP group.</li> <li>ap-group-name—Specifies that the argument following this keyword is the name of the AP group that is configured on the switch.</li> <li><i>ap-group</i>—Name of the access point group that is configured on the switch.</li> </ul>

#### **Related Topics**

Information About Access Point Groups, on page 2

### **Viewing Access Point Group**

#### Before you begin

You must have administrator privileges to perform this operation.

#### **SUMMARY STEPS**

1. show ap groups [extended ]

#### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	show ap groups [extended ]	Displays the AP groups configured on the switch. The
	Example:	<b>extended</b> keyword displays all AP Groups information defined in the system in detail.
	Switch# show ap groups	

#### **Related Topics**

Information About Access Point Groups, on page 2

# **Additional References**

#### **Related Documents**

Related Topic	Document Title
WLAN commands	WLAN Command Reference, Cisco IOS XE Release 3SE (Cisco WLC 5700 Series)WLAN Command Reference, Cisco IOS XE Release 3SE (Catalyst 3650 Switches)
Lightweight Access Point configuration	Lightweight Access Point Configuration Guide, Cisco IOS XE Release 3SE (Cisco WLC 5700 Series)Lightweight Access Point Configuration Guide, Cisco IOS XE Release 3SE (Catalyst 3650 Switches)
Lightweight Access Point commands	Lightweight Access Point Command Reference, Cisco IOS XE Release 3SE (Cisco WLC 5700 Series)Lightweight Access Point Command Reference, Cisco IOS XE Release 3SE (Catalyst 3650 Switches)

#### **Error Message Decoder**

Description	Link
To help you research and resolve system error messages in this release, use the Error Message Decoder tool.	https://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi

#### MIBs

MIB	MIBs Link
11	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:
	http://www.cisco.com/go/mibs

#### **Technical Assistance**

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.	http://www.cisco.com/support
To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.	
Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	

# **Feature History and Information for Access Point Groups**

This table lists the features in this modules and provides links to specific configuration information.

Feature Name	Release	Feature Information
AP Groups	Cisco IOS XE 3.2SECisco IOS XE 3.2SECisco IOS XE 3.3SE	This feature was introduced.