



Configuring Interface Groups

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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. 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.

Information About Interface Groups

Interface groups are logical groups of interfaces. Interface groups facilitate user configuration where the same interface group can be configured on multiple WLANs or while overriding a WLAN interface per AP group. An interface group can exclusively contain either quarantine or nonquarantine interfaces. An interface can be part of multiple interface groups.

A WLAN can be associated with an interface or interface group. The interface group name and the interface name cannot be the same.

This feature also enables you to associate a client to specific subnets based on the foreign controller that they are connected to. The anchor controller WLAN can be configured to maintain a mapping between foreign controller MAC and a specific interface or interface group (Foreign maps) as needed. If this mapping is not

configured, clients on that foreign controller gets VLANs associated in a round robin fashion from interface group configured on WLAN.

You can also configure AAA override for interface groups. This feature extends the current access point group and AAA override architecture where access point groups and AAA override can be configured to override the interface group WLAN that the interface is mapped to. This is done with multiple interfaces using interface groups.

This feature enables network administrators to configure guest anchor restrictions where a wireless guest user at a foreign location can obtain an IP address from multiple subnets on the foreign location and controllers from within the same anchor controller.

Controller marks VLAN as dirty when the clients are unable to receive IP address using DHCP. The VLAN interface is marked as dirty based on two methods:

Aggressive Method—When only one failure is counted per association per client and controller marks VLAN as dirty interface when a failure occurs three times for a client or for three different clients.

Non-Aggressive Method—When only one failure is counted per association per client and controller marks VLAN as a dirty interface only when three or more clients fail.

Creating Interface Groups

Before You Begin

You must create the interface groups using the following commands after you configure the terminal.

SUMMARY STEPS

1. `vlan group groupname vlan-list 1-256`
2. `wlan wlanname 1 wlanname`
3. `client vlan vlangrp1`

DETAILED STEPS

	Command or Action	Purpose
Step 1	<code>vlan group groupname vlan-list 1-256</code>	Creates a VLAN group with the given group name and adds all the VLANs listed in the command. The recommended number of VLANs in a group is 128.
Step 2	<code>wlan wlanname 1 wlanname</code>	Enables the WLAN to map a VLAN group.
Step 3	<code>client vlan vlangrp1</code>	Maps the VLAN group to the WLAN.

Adding a VLAN Group to a WLAN

SUMMARY STEPS

1. `conf t`
2. `wlan wlanname 1 wlanname`
3. `client vlan vlangrp1`
4. `end`

DETAILED STEPS

	Command or Action	Purpose
Step 1	<code>conf t</code> Example:	Enters global configuration mode.
Step 2	<code>wlan wlanname 1 wlanname</code> Example:	Enables the WLAN to map a VLAN group.
Step 3	<code>client vlan vlangrp1</code>	Maps the VLAN group to the WLAN.
Step 4	<code>end</code> Example:	Returns back to exec mode.

Configuring the Trunk Port

Before You Begin

You must configure the VLAN after configuring the controller port as a trunk port. We recommend that you configure the trunk port first and then associate the VLANs to the trunk port.

SUMMARY STEPS

1. `show wireless interface summary`
2. `show run int te1/0/1`
3. `interface TenGigabitEthernet1/0/1`
4. `switchport trunk allowed vlan 1-10`
5. `switchport mode trunk`
6. `nmsp attachment suppress`
7. `end`

DETAILED STEPS

	Command or Action	Purpose
Step 1	show wireless interface summary Example:	Displays all the wireless interfaces in the controller.
Step 2	show run int te1/0/1 Example:	Displays the running configuration available in the controller.
Step 3	interface TenGigabitEthernet1/0/1 Example: interface TenGigabitEthernet1/0/1	Configures the 10-Gigabit Ethernet.
Step 4	switchport trunk allowed vlan 1-10	Configures the trunk port.
Step 5	switchport mode trunk	Configures the switch port mode as a trunk.
Step 6	nmsp attachment suppress	
Step 7	end	Returns to EXEC mode.

Configuring VLAN Interfaces (GUI)

Before You Begin

You can configure VLANs in the controller using the web UI. To do this, you must follow the steps defined in this module in the web UI.

SUMMARY STEPS

1. Choose **Configuration > Controller > System > Interfaces > VLAN Summary**.
2. Click the VLAN ID field in the table to view the details of the selected VLAN.
3. Enter the values.
4. Click **Apply**.
5. To create a new VLAN, click **New**.
6. To delete a VLAN, check the check box in the VLAN summary page, and click **Remove**.

DETAILED STEPS

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- Step 1** Choose **Configuration > Controller > System > Interfaces > VLAN Summary**. This page displays all the VLANs and details of the VLANs in the controller.
- Step 2** Click the VLAN ID field in the table to view the details of the selected VLAN.

The Edit VLAN details page appears.

Step 3 Enter the values.

Step 4 Click **Apply**.

Step 5 To create a new VLAN, click **New**.

Step 6 To delete a VLAN, check the check box in the VLAN summary page, and click **Remove**.

Feature History and Information For Configuring Interface Groups

Command History

Release	Modification
Cisco IOS XE 3.2SE	This command was introduced.

