Configuring Multiple AP-Manager Interfaces

Information About Multiple AP-Manager Interfaces

When you create two or more AP-manager interfaces, each one is mapped to a different port. We recommend that you configure the ports in sequential order so that AP-manager interface 2 is on port 2, AP-manager interface 3 is on port 3, and AP-manager interface 4 is on port 4.

Before an access point joins a controller, it sends out a discovery request. From the discovery response that it receives, the access point can tell the number of AP-manager interfaces on the controller and the number of access points on each AP-manager interface. The access point generally joins the AP-manager with the least number of access points. In this way, the access point load is dynamically distributed across the multiple AP-manager interfaces.

Note Access points may not be distributed completely evenly across all of the AP-manager interfaces, but a certain level of load balancing occurs.

Multiple AP-Manager interfaces are also supported in non-LAG setups, only if you are not going to configure the controller for either LAG or IPv6.

Restrictions on Configuring Multiple AP Manager Interfaces

The following restrictions apply while configuring the multiple AP manager interfaces in the controller:

- You must assign an AP-manager interface to each port on the controller.
- Before implementing multiple AP-manager interfaces, you should consider how they would impact your controller's port redundancy.

- AP-manager interfaces do not need to be on the same VLAN or IP subnet, and they may or may not be on the same VLAN or IP subnet as the management interface. However, we recommend that you configure all AP-manager interfaces on the same VLAN or IP subnet.
- If the port of one of the AP-manager interfaces fails, the controller clears the state of the access points, and the access points must reboot to reestablish communication with the controller using the normal controller join process. The controller no longer includes the failed AP-manager interface in the CAPWAP or LWAPP discovery responses. The access points then rejoin the controller and are load balanced among the available AP-manager interfaces.

  In the case of management interface, because there is support for backup port, APs already connected to management interface continue to be in connected state (falling to backup port) rather than dropping off. However, AP-Mgr will get disabled any new APs will associate with the current AP-Mgr.

Creating Multiple AP-Manager Interfaces (GUI)

Step 1 Choose **Controller > Interfaces** to open the Interfaces page.

Step 2 Click **New**.

The Interfaces > New page appears.

Step 3 Enter an AP-manager interface name and a VLAN identifier.

Step 4 Click **Apply** to commit your changes. The Interfaces > Edit page appears.

Step 5 Enter the appropriate interface parameters.

Note Every interface supports primary and backup port with the following exceptions:

- Dynamic interface is converted to AP manager which does not support backup of port configuration.
- If AP manager is enabled on management interface and when management interface moves to backup port because of primary port failure, the AP manager will be disabled.

Step 6 To make this interface an AP-manager interface, check the **Enable Dynamic AP Management** check box.

Note Only one AP-manager interface is allowed per physical port. A dynamic interface that is marked as an AP-manager interface cannot be used as a WLAN interface.

Step 7 Click **Save Configuration** to save your settings.

Step 8 Repeat this procedure for each additional AP-manager interface that you want to create.

Creating Multiple AP-Manager Interfaces (CLI)

Step 1 Enter these commands to create a new interface:

- **config interface create** *operator_defined_interface_name* {*vlan_id* | *x*}

- **config interface address** *operator_defined_interface_name ip_addr ip_netmask* [*gateway*]
- **config interface vlan** *operator_defined_interface_name vlan_id*
- **config interface port** *operator_defined_interface_name physical_ds_port_number*
- **config interface dhcp** *operator_defined_interface_name ip_address_of_primary_dhcp_server* [*ip_address_of_secondary_dhcp_server*]
- (Optional) **config interface quarantine vlan** *interface_name vlan_id*

  Note Use this command to configure a quarantine VLAN on any interface.

- (Optional) **config interface acl** *operator_defined_interface_name access_control_list_name*

Step 2 To make this interface an AP-manager interface, enter this command:

{**config interface ap-manager** *operator_defined_interface_name* **enable | disable**}

Note Only one AP-manager interface is allowed per physical port. A dynamic interface that is marked as an AP-manager interface cannot be used as a WLAN interface.

Step 3 Enter **save config** command to save your changes.

Step 4 Repeat this procedure for each additional AP-manager interface that you want to create.