

# Wireless LAN Controller Restrict Clients per WLAN Configuration Example

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## [Introduction](#)

This document describes how to set a limit to the number of clients that can connect to the WLAN in a Cisco Unified Wireless Network (CUWN).

## [Prerequisites](#)

## [Requirements](#)

Ensure that you have basic knowledge of the Cisco Unified Wireless Network (CUWN) before you attempt this configuration:

## [Components Used](#)

The information in this document is based on these software and hardware versions:

- 4400 Wireless LAN Controller (WLC) that runs firmware version 7.0.116.0
- 1131 Lightweight Access Point (LAP)
- 802.11a/b/g Wireless LAN Client Adapters that run software version 4.0

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

## [Client Limit on a WLC](#)

Each of the WLC platforms have an upper limit on the number of WLAN clients that they support. This table shows the upper limit for the various controller platforms:

WLC Platform	Maximum No of Clients
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Cisco 2100 Series Controller	350
Cisco 2500 Series Controller	500
Cisco 4400 Series Controller	5000
Cisco 5500 Series Controller	7000
Cisco Flex 7500 Series Controller	20000
WiSM2	10000

To give more control, WLC also provides the option to define the number of clients that connect to each WLAN. This feature is useful in cases where you want to restrict the number of clients (for example, guest clients) that connect to the network, and it also ensure that the WLAN bandwidth is used efficiently in the network.

By default this value is set to 0, which means there is no restriction on the number of clients that can connect to the WLAN.

**Note:** Currently, you cannot restrict the number of clients that connects to an LAP. Some of the LAPs have limits on clients association. More information on this is available in the [Client Association Limits for Lightweight Access Points](#) section of the WLC configuration guide.

The next section describes how to configure the maximum number of clients on a WLAN.

## [Configure](#)

In this section, you are presented with the information to configure the features described in this document.

In this configuration example, a LAP is registered to a WLC. Two WLANs are configured (LAP1 and LAP2) to which users connect. This example describes how to configure these WLANs in such a way that, at any point, WLAN LAP1 accepts only 25 clients and WLAN LAP2 accepts 50 client associations.

### [Configure the WLC](#)

This procedure assumes that the WLANs (LAP1 and LAP2) are already configured and describes how to enable the maximum clients feature on these WLANs.

1. From the WLC GUI, click **WLANs**.The WLANs page appears. This page lists the WLANs that are configured on the WLC.
2. Click **WLAN ID 1** in order to select the WLAN LAP1. The WLANs Edit page appears.
3. Click the **Advanced** tab.
4. Enter the maximum number of clients allowed in the Maximum Allowed Clients field. This example uses 25 for LAP1.
5. Repeat these steps for WLAN LAP2 and configure the maximum client allowed limit to 50.

**Note:** To accomplish this configuration through the WLC CLI, use this command: **config wlan max-associated-clients max-clients <wlanid>**

## [Verify](#)

You can use the **show wlan <wlan id>** command to verify the configuration as shown in this sample code:

```
(Cisco Controller) >show wlan 1
WLAN Identifier..... 1
Profile Name..... LAP1
Network Name (SSID)..... LAP1
Status..... Enabled
MAC Filtering..... Disabled
Broadcast SSID..... Disabled
AAA Policy Override..... Disabled
Network Admission Control
  Radius-NAC State..... Disabled
  SNMP-NAC State..... Disabled
  Quarantine VLAN..... 0
Maximum number of Associated Clients..... 25
Number of Active Clients..... 0
Exclusionlist Timeout..... 60 seconds
Session Timeout..... 1800 seconds
CHD per WLAN..... Enabled
Webauth DHCP exclusion..... Disabled
Interface..... vlan50
Multicast Interface..... Not Configured
```

## [Related Information](#)

- [Cisco Wireless LAN Controller Command Reference, Release 7.0.116.0](#)
- [Cisco Wireless LAN Controller Configuration Guide, Release 7.0.116.0](#)
- [Technical Support & Documentation - Cisco Systems](#)