

Configure Client QoS MAC Class Map on the WAP125

Introduction

The Quality of Service (QoS) feature on the WAP125 contains Differentiated Services (DiffServ) support that allows you to classify and manage network traffic. The configuration of DiffServ begins with the configuration of a class map. A Class Map identifies the traffic that need to be policed. It works as a component of a Policy Map. Class Maps contain conditions that traffic need to match in order to be forwarded or dropped.

There can be many Class Maps in a Policy Map where either one Class Map can be matched, or all Class Maps should be matched for the action specified in the Policy Map to take place. A Class Map and a Policy Map are to be created to complete the QoS configuration of an access point. Class maps are typically utilized to filter traffic based on the IP Address type or MAC address. This results to optimum network performance since unwanted traffic is dropped.

Objective

This article aims to show you how to configure a Client QoS MAC Class Map on the WAP125 access point.

Applicable Devices

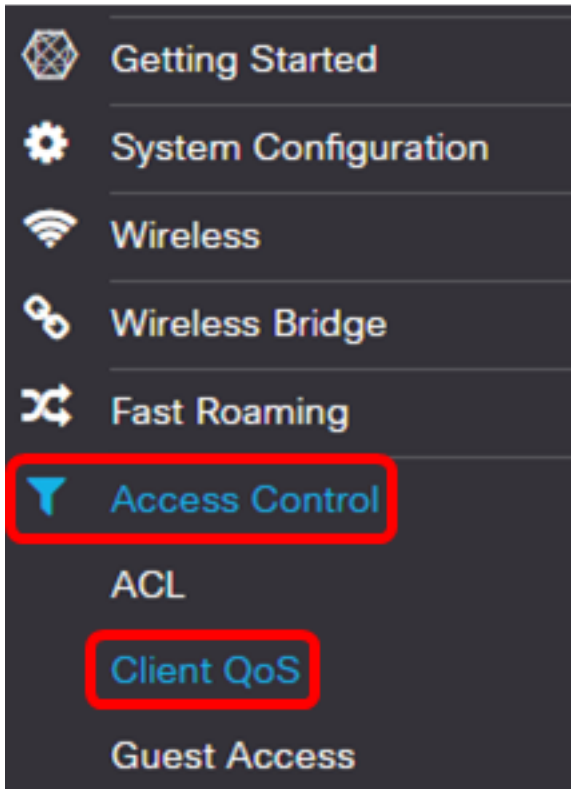
- WAP125

Software Version

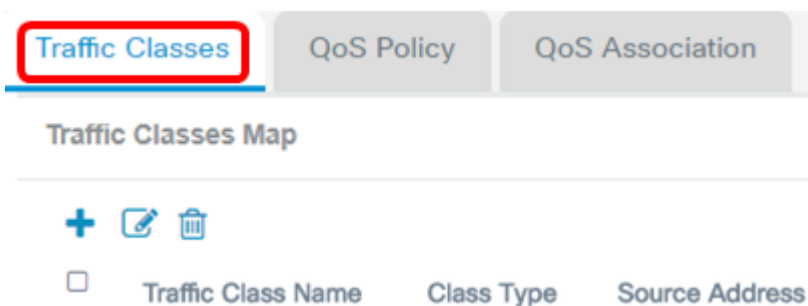
- 1.0.0.4

Configure MAC Class Map

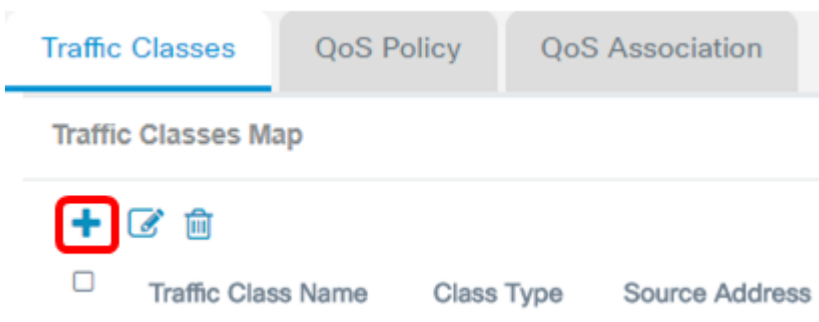
Step 1. Log in to the web-based utility of the WAP125 and choose **Access Control > Client QoS**.



Step 2. Click the **Traffic Classes** tab.



Step 3. Click the **+** button to add a traffic class.



Note: You can add up to 50 class maps.

Step 4. Enter a name for the class map in the *Traffic Class Name* field. The name can be a combination of letters, numbers, and special characters up to 31 characters, without spaces.

Traffic Class			
Name	Class Type	Source Address	
<input type="checkbox"/> IPv6Traffic	IPv6	Any	
<input checked="" type="checkbox"/> MACTraffic	MAC	Any	

Note: In this example, MACTraffic is entered.

Step 5. Choose **MAC** from the Class Type drop-down list.

Traffic Class			
Name	Class Type	Source Address	
<input type="checkbox"/> IPv6Traffic	IPv6	Any	
<input checked="" type="checkbox"/> MACTraffic	MAC IPv4 IPv6 MAC	Any	

Note: If you want to know how to configure an IPv4 Class Map, click [here](#). For IPv6 Class Map configuration, click [here](#).

Step 6. Click the **More...** button.

Details Of Services

Step 7. Choose a Protocol to match by keyword or enter a protocol ID. The options are:

- All Traffic — This option allows all traffic from any protocol. If this option is chosen, all other fields will be unavailable. Proceed to [Step 13](#).
- Select from List — This option lets you choose from Apple Talk, ARP, IPv4, IPv6, IPX, NETBIOS, or PPPoE. If this option is chosen, skip to [Step 8](#).
- Custom — This option allows you to enter a protocol ID. The protocol ID is a standard assigned by the Internet Assigned Numbers Authority (IANA). If this is chosen, proceed to [Step 9](#).

Services

Protocol:	All Traffic ▼
Class Of Service:	All Traffic Select From List Custom
VLAN ID:	Any ▼

OK

cancel

Note: In this example, Select From List is chosen.

Step 8. (Optional) Define the protocol that needs to be matched. The options from the drop-down list are:

- Apple Talk — This option filters Apple Talk packets.
- ARP — This option filters Address Resolution Protocol (ARP) packets.
- IPv4 — This option filters IPv4 packets.
- IPv6 — This option filters IPv6 packets.
- IPX — This option filters the Internetwork Packet Exchange (IPX) protocol.
- NETBIOS — This option filters the Network Basic Input/Output System service packets.
- PPPoE — This option filters Point-to-Point Protocol over Ethernet protocol packets.

Services

Protocol:	Select From List ▼	Apple Talk ▼
Class Of Service:	Any ▼	Apple Talk ARP IPv4 IPv6 IPX NETBIOS PPPoE
VLAN ID:	Any ▼	

OK

cancel

Note: In this example, IPv6 is chosen.

Step 9. (Optional) Enter the custom protocol number in the *Protocol* field.

Services

Protocol:	Custom ▾	3
Class Of Service:	Any ▾	
VLAN ID:	Any ▾	

Note: In this example, 3 is entered.

Step 10. Choose a class of service from the Class of Service drop-down list. The options are:

- Any — This option considers any origin port a match. If this option is chosen, proceed to [Step 13](#).
- User Defined — This option lets you enter a specific CoS value.

Services

Protocol:	Select From List ▾	IPv6 ▾
Class Of Service:	Any ▾	
VLAN ID:	User Defined	

Note: In this example, Any is chosen.

Step 11. Choose a Virtual Local Area Network (VLAN) from the VLAN ID drop-down list. The options are:

- Any — This option considers any VLAN a match. If this option is chosen, proceed to [Step 13](#).
- User Defined — This option lets you match a keyword associated with the source port which becomes translated into its equivalent port number. These keywords are ftp, ftpdata, http, smtp, snmp, telnet, tftp and www.

Services

Protocol:	Select From List ▼	IPv6 ▼
Class Of Service:	Any ▼	
VLAN ID:	Any ▼ Any User Defined	

Note: In this example, User Defined is chosen.

Step 12. (Optional) Enter the VLAN ID in the *VLAN ID* field.

Services

Protocol:	Select From List ▼	IPv6 ▼
Class Of Service:	Any ▼	
VLAN ID:	User Defined ▼	17

Note: In this example, 17 is entered.

Step 13. Click **OK**.

Services

Protocol:	Select From List ▼	IPv6 ▼
Class Of Service:	Any ▼	
VLAN ID:	User Defined ▼	17

OK cancel

Step 14. Choose the Source Address. The source address of a packet requires a source MAC address of a packet to match the defined MAC address. The options are:

- Any — This option allows any source IP address to be a match.
- Single Address — This option lets you specify the source MAC address in the *Source Address* field.
- Address/Mask — This option lets you specify an IP range as the source IP address. If this option is chosen, enter the IP address and the corresponding subnet mask of the IP address.

Source Address

Any ▼
Any
Single Address
Address/Mask

Note: In this example, Any is chosen.

Step 15. From the Destination Address drop-down list, choose the destination address that a packet needs to be considered a match. The options are:

- Any — This option treats any destination MAC address as a match.
- Single Address — This option lets you specify a single destination MAC address.
- Address/Mask. — This option lets you specify an IP address and the subnet mask in the Destination Address and Destination Mask fields.

Destination Address

Single Address: ▼
Any
Single Address
Address/Mask

Note: In this example, Single Address is chosen.

Step 16. (Optional) Enter the MAC address in the *Destination Address* field.

Destination Address

Single Address: ▾

1A:2B:3C:4D:5E:6F

Note: In this example, 1A:2B:3C:4D:5E:6F is entered.

Step 17. Click **Save**.

Client QoS

Save

Traffic Classes | QoS Policy | QoS Association

Traffic Classes Map

Traffic Class Name	Class Type	Source Address	Destination Address	Details Of Services
MACClassMap	MAC	Any	Single Address 1A:2B:3C:4D:5E:6F	More...

You now have configured a MAC Class Map on the WAP125 access point.