

Client QoS Association Settings on the WAP371

Objective

Client Quality of Service (QoS) Association is used to control the wireless clients connected to the network, and allows you to manage the bandwidth that the clients are able to use. Client QoS Association also allows you to control traffic with the use of Access Control Lists (ACLs). An ACL is a collection of permit and deny conditions, or rules that provide security. They can block unauthorized users and allow authorized users to access specific resources. ACLs can block any unwarranted attempts to reach network resources.

The objective of this document is to show you how to configure QoS Association settings on the WAP371.

Applicable Devices

- WAP371

Software Version

- v1.2.0.2

Client QoS Association Configuration

Step 1. Log in to the web configuration utility and choose **Client QoS > Client QoS Association**. The *Client QoS Association* page opens:

Client QoS Association

Radio: ☒ Radio 1 (5 GHz) ☐ Radio 2 (2.4 GHz)

VAP:

Client QoS Mode: ☐ Enable

Bandwidth Limit Down: Mbps (Range: 0 - 1300)

Bandwidth Limit Up: Mbps (Range: 0 - 1300)

ACL Type Down:

ACL Name Down:

ACL Type Up:

ACL Name Up:

DiffServ Policy Down:

DiffServ Policy Up:

Step 2. Click the desired radio frequency in the *Radio* field.

Client QoS Association

Radio: ☒ Radio 1 (5 GHz) ☐ Radio 2 (2.4 GHz)

VAP:

Client QoS Mode: ☐ Enable

Bandwidth Limit Down: Mbps (Range: 0 - 1300)

Bandwidth Limit Up: Mbps (Range: 0 - 1300)

The options are described as follows:

- Radio 1 – Has a radio frequency of 5 GHz which offers a speed increase over 2.4 GHz as well as offers more channels that are less likely to be polluted with interference. However, it may provide less range and is available only for newer devices that support it.
- Radio 2 – Has a radio frequency of 2.4 GHz that supports older devices and offers a larger range than 5GHz, but has lower speeds.

Step 3. Select the desired Virtual Access Point (VAP) for which you want to configure the Client QoS parameters in the *VAP* drop-down list. A VAP is used to segment the wireless LAN into multiple broadcast domains. There can be up to eight VAPs for each radio type.

Client QoS Association

Radio: ☒ Radio 1 (5 GHz)
☐ Radio 2 (2.4 GHz)

VAP: VAP 0 (ciscosb) ▼

Client QoS Mode: VAP 0 (ciscosb)
VAP 1 (Virtual Access Point 2)
VAP 2 (Virtual Access Point 3)
VAP 3 (Virtual Access Point 4)
VAP 4 (Virtual Access Point 5)
VAP 5 (Virtual Access Point 6)
VAP 6 (Virtual Access Point 7)
VAP 7 (Virtual Access Point 8)

Bandwidth Limit Down: 0 Mbps (Range: 0 - 1300)

Bandwidth Limit Up: 0 Mbps (Range: 0 - 1300)

ACL Type Down: None

[Step 4](#). Check the **Enable** checkbox in the *Client QoS Mode* field to enable the QoS service for the chosen VAP.

Client QoS Association

Radio: ☒ Radio 1 (5 GHz)
☐ Radio 2 (2.4 GHz)

VAP: VAP 0 (ciscosb) ▼

Client QoS Mode: ☒ Enable

Bandwidth Limit Down: 0 Mbps (Range: 0 - 1300)

Bandwidth Limit Up: 0 Mbps (Range: 0 - 1300)

Step 5. Enter the desired maximum allowed transmission rate from the WAP device to the client in bits per second in the *Bandwidth Limit Down* field. The range is from 0-1300 Mbps, where 0 is unlimited.

Client QoS Association

Radio: ☒ Radio 1 (5 GHz)
☐ Radio 2 (2.4 GHz)

VAP: VAP 0 (ciscosb) ▼

Client QoS Mode: ☒ Enable

Bandwidth Limit Down: 500 Mbps (Range: 0 - 1300)

Bandwidth Limit Up: 0 Mbps (Range: 0 - 1300)

Note: Client QoS Mode must be enabled both in [Step 4](#), as well as in **Client QoS > Global Settings** for the bandwidth limit to take effect.

Step 6. Enter the maximum allowed transmission rate from the client to the WAP device in bits per second in the *Bandwidth Limit Up* field. The range is from 0-1300 Mbps, where 0 is unlimited.

Client QoS Association

Radio: ☒ Radio 1 (5 GHz)
☐ Radio 2 (2.4 GHz)

VAP:

Client QoS Mode: ☒ Enable

Bandwidth Limit Down: Mbps (Range: 0 - 1300)

Bandwidth Limit Up: Mbps (Range: 0 - 1300)

Note: Client QoS Mode must be enabled both in [Step 4](#), as well as in **Client QoS > Global Settings** for the bandwidth limit to take effect.

Step 7. Select the type of ACL in the *ACL Type Down* drop-down list to apply to traffic in the outbound (WAP device-to-client) direction.

Bandwidth Limit Down: Mbps (Range: 0 - 1300)

Bandwidth Limit Up: Mbps (Range: 0 - 1300)

ACL Type Down:

ACL Name Down:

ACL Type Up:

ACL Name Up:

DiffServ Policy Down:

DiffServ Policy Up:

The options are described as follows:

- None – No ACL type is selected.
- IPv4 – The ACL examines IPv4 packets for matches to the ACL rules.
- IPv6 – The ACL examines IPv6 packets for matches to the ACL rules.
- MAC – The ACL examines Layer 2 frames for matches to the ACL rules.

Step 8. Select the name of the ACL in the *ACL Name Down* drop-down list to be applied to traffic in the outbound direction.

Bandwidth Limit Down: Mbps (Range: 0 - 1300)

Bandwidth Limit Up: Mbps (Range: 0 - 1300)

ACL Type Down:

ACL Name Down: ACL_test ▼
ACL_test

ACL Type Up:

ACL Name Up:

DiffServ Policy Down:

DiffServ Policy Up:

Note: In order to select an ACL, you must have a previously configured ACL rule(s) in **Client QoS > ACL**. For more information, refer to [ACL Rule Configuration on the WAP371](#).

Step 9. Select the type of ACL in the *ACL Type Up* drop-down list to apply to traffic in the inbound (client-to-WAP device) direction.

Bandwidth Limit Down: Mbps (Range: 0 - 1300)

Bandwidth Limit Up: Mbps (Range: 0 - 1300)

ACL Type Down:

ACL Name Down:

ACL Type Up: None ▼
None
IPv4
IPv6
MAC

ACL Name Up:

DiffServ Policy Down:

DiffServ Policy Up:

The options are described as follows:

- None – No ACL type is selected.
- IPv4 – The ACL examines IPv4 packets for matches to the ACL rules.
- IPv6 – The ACL examines IPv6 packets for matches to the ACL rules.
- MAC – The ACL examines Layer 2 frames for matches to the ACL rules.

Step 10. Select the name of the ACL in the *ACL Name Up* drop-down list to be applied to traffic in the inbound direction.

Bandwidth Limit Down: Mbps (Range: 0 - 1300)

Bandwidth Limit Up: Mbps (Range: 0 - 1300)

ACL Type Down:

ACL Name Down:

ACL Type Up:

ACL Name Up:

DiffServ Policy Down:

DiffServ Policy Up:

Note: In order to select an ACL, you must have a previously configured ACL rule(s) in **Client QoS > ACL**. For more information refer to [ACL Rule Configuration on the WAP371](#).

Step 11. Select the desired DiffServ policy from the *DiffServ Policy Down* drop-down list to be applied to traffic from the WAP device in the outbound direction.

ACL Type Down:

ACL Name Down:

ACL Type Up:

ACL Name Up:

DiffServ Policy Down:

DiffServ Policy Up:

Note: In order to select a DiffServ policy, you must have a previously configured DiffServe policy in **Client QoS > Policy Map**. For more information please refer to [Creating a Policy Map on the WAP131, WAP351, and WAP371](#).

Step 12. Select the desired DiffServ policy from the *DiffServ Policy Up* drop-down list to be applied to traffic from the WAP device in the inbound direction.

ACL Type Down: IPv4

ACL Name Down: ACL_test

ACL Type Up: IPv4

ACL Name Up: ACL_test

DiffServ Policy Down: policy1

DiffServ Policy Up: policy1
policy2

Save

Note: In order to select a DiffServ policy, you must have a previously configured DiffServ policy in **Client QoS > Policy Map**. For more information please refer to the [Creating a Policy Map on the WAP131, WAP351, and WAP371](#) article.

Step 13. Click **Save** to save the settings.

Client QoS Association

Radio: ☒ Radio 1 (5 GHz)
☐ Radio 2 (2.4 GHz)

VAP: VAP 0 (ciscosb)

Client QoS Mode: ☒ Enable

Bandwidth Limit Down: 500 Mbps (Range: 0 - 1300)

Bandwidth Limit Up: 500 Mbps (Range: 0 - 1300)

ACL Type Down: IPv4

ACL Name Down: ACL_test

ACL Type Up: IPv4

ACL Name Up: ACL_test

DiffServ Policy Down: policy1

DiffServ Policy Up: policy2

Save