DSCP Settings on the RV130 and RV130W

Objective

Differentiated Services Code Point (DSCP) is used to classify network traffic and assign different levels of service to packets by marking them with DSCP codes in the IP header field. The DSCP settings will dictate how DSCP values map to Quality of Service (QoS), which is a method of managing priority levels of traffic on a network. The network tries to deliver a particular kind of service based on the QoS specified by each packet. DSCP is also used for several mission-critical applications and for providing end-to-end QoS. Typically, Differentiated Services is appropriate for aggregate flows because it performs a relatively coarse level of traffic classification. Through DSCP, the router can use the priority bits in the Type of Service (ToS) octet to prioritize traffic over QoS in layer 3.

The objective of this document is to show you how to configure DSCP settings on the RV130 and RV130W routers.

Applicable Devices

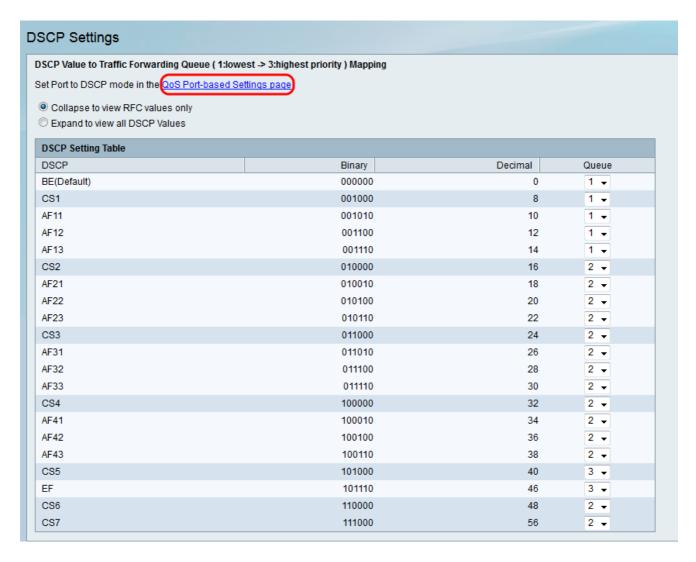
- RV130
- RV130W

Configure DSCP Settings

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

DSCP Settings DSCP Value to Traffic Forwarding Queue (1:lowest -> 3:highest priority) Mapping Set Port to DSCP mode in the QoS Port-based Settings page Collapse to view RFC values only Expand to view all DSCP Values **DSCP Setting Table** DSCP Decimal Queue Binary 000000 BE(Default) 0 1 ▼ CS1 001000 8 1 🔻 AF11 001010 10 1 ▼ AF12 001100 12 1 ▼ AF13 001110 14 1 -2 🔻 CS2 010000 16 2 🕶 AF21 010010 18 AF22 010100 20 2 🔻 AF23 010110 22 2 🕶 2 🔻 CS3 011000 24 AF31 011010 26 2 🕶 AF32 2 🔻 011100 28 AF33 011110 30 2 🕶 CS4 100000 32 2 🔻 2 🔻 AF41 100010 34 2 🕶 AF42 100100 36 AF43 100110 38 2 🔻 CS5 101000 3 🕶 FF 101110 46 3 ₩ CS6 110000 48 2 ▼ CS7 111000 56 2 🔻

Note: In order for subsequent changes to be effective, Trust Mode must be set to DSCP mode for the port you want to apply the DSCP settings to. If you haven't set the port to DSCP mode, click **QoS Port-based Settings page**. Refer to the article, <u>QoS Port Based Settings on the RV130 and RV130W</u> for more details.

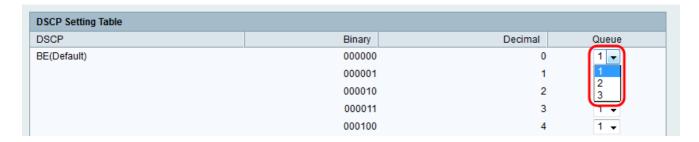


Step 2. Click the **Expand to view all DSCP Values** radio button to list all DSCP values instead of only listing RFC values in the *DSCP Settings* Table.



Note: The RFC values provide the recommended relationship between service classes, and DSCP assignment.

Step 3. For each DSCP value in the *DSCP Settings* Table, choose a priority level from the *Queue* drop-down list. This maps the DSCP value to the selected QoS queue.



Note: There are 3 values available to set to indicate priority level. Higher numbers indicate higher priority levels.

Step 4. Click **Save** in order to apply changes.

