

# 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	Binary	Decimal	Queue
BE(Default)	000000	0	1 ▾
CS1	001000	8	1 ▾
AF11	001010	10	1 ▾
AF12	001100	12	1 ▾
AF13	001110	14	1 ▾
CS2	010000	16	2 ▾
AF21	010010	18	2 ▾
AF22	010100	20	2 ▾
AF23	010110	22	2 ▾
CS3	011000	24	2 ▾
AF31	011010	26	2 ▾
AF32	011100	28	2 ▾
AF33	011110	30	2 ▾
CS4	100000	32	2 ▾
AF41	100010	34	2 ▾
AF42	100100	36	2 ▾
AF43	100110	38	2 ▾
CS5	101000	40	3 ▾
EF	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, [QoS Port Based Settings on the RV130 and RV130W](#) for more details.

## DSCP Settings

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DSCP Setting Table			
DSCP	Binary	Decimal	Queue
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AF21	010010	18	2
AF22	010100	20	2
AF23	010110	22	2
CS3	011000	24	2
AF31	011010	26	2
AF32	011100	28	2
AF33	011110	30	2
CS4	100000	32	2
AF41	100010	34	2
AF42	100100	36	2
AF43	100110	38	2
CS5	101000	40	3
EF	101110	46	3
CS6	110000	48	2
CS7	111000	56	2

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.

## 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	Binary	Decimal	Queue
BE(Default)	000000	0	1
	000001	1	1
	000010	2	1
	000011	3	1
	000100	4	1
	000101	5	1

**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.

DSCP Setting Table			
DSCP	Binary	Decimal	Queue
BE(Default)	000000	0	1
	000001	1	2
	000010	2	3
	000011	3	1
	000100	4	1

**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.

CS7	111000	56	2
	111001	57	2
	111010	58	2
	111011	59	2
	111100	60	2
	111101	61	2
	111110	62	2
	111111	63	2

Save    Restore Default    Cancel