Map Differentiated Services Code Point to Queue on Sx500 Series Stackable Switches

Objective

The DSCP (IP Differentiated Services Code Point) to Queue page maps DSCP to egress queues. An egress queue basically has outgoing traffic. The DSCP to Queue Table determines the egress queues of the incoming IP packets based on their DSCP values. The original VPT (VLAN Priority Tag) of the packet is unchanged. This article explains how to Map DSCP to Queue on Sx500 Series Stackable Switches.

It is possible to achieve the desired quality of services in a network by simply changing the DSCP to Queue mapping, Queue schedule method and bandwidth allocation.

Note: The DSCP to Queue mapping is applicable to IP packets if the switch is in QoS Basic mode and DSCP is the trusted mode, or the switch is in QoS Advanced mode and the packets belongs to flows that is DSCP trusted.

Applicable Devices

• Sx500 Series Stackable Switches

Software Version

• 1.3.0.62

Procedure for Map DSCP to Queue

Step 1. Log in to the web configuration utility, and choose **Quality of Service > General > DSCP to Queue**. The *DSCP to Queue* page opens:

DSCP to Queue Table

Ingress DSCP	Output Queue	Ingress DSCP	Output Queue	Ingress DSCP	Output Queue	Ingress DSCP	Output Queue
0 (BE)	1 ▾	16 (CS2)	2 ▾	32 (CS4)	3 ▾	48 (CS6)	3 ▾
1	1 ▾	17	2 ▾	33	3 ▾	49	3 ▾
2	1 ▾	18 (AF21)	2 ▾	34 (AF41)	3 ▾	50	3 ▾
3	1 ▾	19	2 ▾	35	3 ▾	51	3 ▾
4	1 ▾	20 (AF22)	2 ▾	36 (AF42)	3 ▾	52	3 ▾
5	1 ▾	21	2 ▾	37	3 ▾	53	3 ▾
6	1 ▾	22 (AF23)	2 ▾	38 (AF43)	3 ▾	54	3 ▾
7	1 ▾	23	2 ▾	39	3 ▾	55	3 ▾
8 (CS1)	1 ▾	24 (CS3)	3 ▾	40 (CS5)	4 ▾	56 (CS7)	3 ▾
9	1 ▾	25	3 ▾	41	4 ▾	57	3 ▾
10 (AF11)	1 ▾	26 (AF31)	3 ▾	42	4 ▾	58	3 ▾
11	1 ▾	27	3 ▾	43	4 ▾	59	3 ▾
12 (AF12)	1 ▾	28 (AF32)	3 ▾	44	4 ▾	60	3 ▾
13	1 ▾	29	3 ▾	45	4 ▾	61	3 ▾
14 (AF13)	1 ▾	30 (AF33)	3 ▾	46 (EF)	4 ▾	62	3 ▾
15	1 ▾	31	3 ▾	47	4 ▾	63	3 ▾

[Apply] [Cancel] [Restore Defaults]

• Ingress DSCP — This displays the DSCP value of the incoming packet that needs to be remarked to an alternative value.

• Output Queue — This allows you to determine the queue to be used.

DSCP to Queue

DSCP to Queue Table

Ingress DSCP	Output Queue	Ingress DSCP	Output Queue	Ingress DSCP	Output Queue	Ingress DSCP	Output Queue
0 (BE)	1 ▾	16 (CS2)	2 ▾	32 (CS4)	3 ▾	48 (CS6)	3 ▾
1	1	17	2 ▾	33	3 ▾	49	3 ▾
2	2	18 (AF21)	2 ▾	34 (AF41)	3 ▾	50	3 ▾
3	3	19	2 ▾	35	3 ▾	51	3 ▾
4	4	20 (AF22)	2 ▾	36 (AF42)	3 ▾	52	3 ▾
5	1 ▾	21	2 ▾	37	3 ▾	53	3 ▾
6	1 ▾	22 (AF23)	2 ▾	38 (AF43)	3 ▾	54	3 ▾
7	1 ▾	23	2 ▾	39	3 ▾	55	3 ▾
8 (CS1)	1 ▾	24 (CS3)	3 ▾	40 (CS5)	4 ▾	56 (CS7)	3 ▾
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10 (AF11)	1 ▾	26 (AF31)	3 ▾	42	4 ▾	58	3 ▾
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13	1 ▾	29	3 ▾	45	4 ▾	61	3 ▾
14 (AF13)	1 ▾	30 (AF33)	3 ▾	46 (EF)	4 ▾	62	3 ▾
15	1 ▾	31	3 ▾	47	4 ▾	63	3 ▾

[Apply] [Cancel] [Restore Defaults]

Step 2. Choose the Output Queue (traffic forwarding queue) to which the DSCP value is mapped from the output Queue drop-down list. The DSCP to Queue page contains Ingress DSCP. It displays the DSCP value in the incoming packet and it is associated class.

DSCP to Queue Table

Ingress DSCP	Output Queue	Ingress DSCP	Output Queue	Ingress DSCP	Output Queue	Ingress DSCP	Output Queue
0 (BE)	1 ▾	16 (CS2)	2 ▾	32 (CS4)	3 ▾	48 (CS6)	3 ▾
1	1 ▾	17	2 ▾	33	3 ▾	49	3 ▾
2	1 ▾	18 (AF21)	2 ▾	34 (AF41)	3 ▾	50	3 ▾
3	1 ▾	19	2 ▾	35	3 ▾	51	3 ▾
4	1 ▾	20 (AF22)	2 ▾	36 (AF42)	3 ▾	52	3 ▾
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9	1 ▾	25	3 ▾	41	4 ▾	57	3 ▾
10 (AF11)	1 ▾	26 (AF31)	3 ▾	42	4 ▾	58	3 ▾
11	1 ▾	27	3 ▾	43	4 ▾	59	3 ▾
12 (AF12)	1 ▾	28 (AF32)	3 ▾	44	4 ▾	60	3 ▾
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[Apply]   [Cancel]   (Restore Defaults)

Step 3. (Optional) Click **Restore Defaults** to restore the default settings.

Step 4. Click **Apply** to save the changes.