

# DSCP Commands

DSCP (Differentiated Services Code Point) is a field in the header of an IP packet that is used to provide QoS (Quality of Service). You can mark each packet with a DSCP code and assign to it the corresponding level of service. PicOS 2.6 enables users to map a specific DSCP value to an interface queue. If you do not configure DSCP mappings, PicOS 2.6 uses the following defaults:

DSCP Values	Queue
0-7	q0
8-15	q1
16-23	q2
24-31	q3
32-39	q4
40-47	q5
48-55	q6

The following command is used to enable or disable DSCP mapping:

```
ovs-vsctl set-cos-map <true | false>
```

By default, DSCP mapping is disabled in PicOS 2.6. Once DSCP mapping is enabled, packets with different DSCP values are placed in different queues (q0-q7).

The following example enables DSCP mapping:

```
ovs-vsctl set-cos-map true
```

The following example disables DSCP mapping:

```
ovs-vsctl set-cos-map false
```

The default DSCP map for interface **ge-1/1/1** can be modified as shown below:

```
ovs-vsctl set interface ge-1/1/1 dscp_map=0=q1,1=q1,2=q2
```

An alternative method would be to use the following command:

```
ovs-vsctl set interface ge-1/1/1 dscp_map:0=q1, dscp_map:1=q1 dscp_map:2=q2
```

DSCP values range from 0 to 63. The available queues are q0, q1, q2, q3, q4, q5, q6, and q7. If a DSCP value is not configured, the default queue is q0. Incoming packets with any DSCP values will be treated the same.

Use the following command to clear the DSCP map of an interface:

```
ovs-vsctl clear interface ge-1/1/1 dscp_map
```

Use the following command to set the DSCP map of an interface:

```
ovs-vsctl set interface ge-1/1/1 dscp_map=0=q1,1=q1,2=q2
```

or

```
ovs-vsctl set interface ge-1/1/1 dscp_map:0=q1 dscp_map:1=q1 dscp_map:2=q2
```

You may use the following commands to show the DSCP map:

```
ovs-vsctl show-cos-map  
ovs-vsctl show-cos-map ge-1/1/1
```