



# IKEv2 DSCP Marking

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This feature enables DSCP marking for all IKEv2 messages to the peer.

The following topics are discussed:

- [Feature Description, on page 1](#)
- [Configuring IKEv2 DSCP Marking, on page 1](#)
- [Monitoring and Troubleshooting IKEv2 DSCP Marking, on page 2](#)

## Feature Description

This feature enables DSCP values to be included in all IKEv2 packets sent to the peer on the SWu interface. These IKEv2 packets are sent from the gateway to the UE (peer) in the IKEv2 SA\_INIT Response message, and subsequently in all IKEV2 AUTH\_RESP messages. The DSCP value is either marked in the TOS octet of the IPv4 header or the Traffic Class octet of the IPv6 header as defined in *RFC 2474*. The DSCP-marked IKEv2 packets are given higher priority on the network, and enables sessions to be established faster while minimizing packet drops.

The DSCP value can be configured using the **ikev2-ikesa dscp** command under the Crypto Template Configuration Mode. A default DSCP value of zero (0x00) is set when no configuration exists. For more information on configuring the DSCP value, refer [Configuring IKEv2 DSCP Marking, on page 1](#) of this chapter.

## Standards Compliance

This feature complies with the following standard(s):

- **RFC 2474** - Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers

## Configuring IKEv2 DSCP Marking

### Setting DSCP Value

Use the following configuration to set the DSCP value for the IKEv2 packets sent to the peer:

```

config
  context context_name
    crypto template template_name ikev2-dynamic
      ikev2-ikesa dscp dscp_hex_value
    end

```

**Notes:**

- *dscp\_hex\_value* must be an hexa-decimal value between 0x00 and 0x3F.
- Use the **default ikev2-ikesa dscp** command to restore the configuration to its default value.
- **Default:** 0x00

# Monitoring and Troubleshooting IKEv2 DSCP Marking

## IKEv2 DSCP Marking Show Command(s) and/or Outputs

### show crypto ikev2-ikesa security-associations

The following field is available to the output of the **show crypto ikev2-ikesa security-associations** command in support of this feature:

```

IKEv2 SA: 1
          DSCP           : 0x23

```

**Table 1: show crypto ikev2-ikesa security-associations Command Output Descriptions**

Field	Description
DSCP	Configured DSCP value to be included in the IKEv2 SA packets for the crypto template.

### show crypto template

The following field is available to the output of the **show crypto template** command in support of this feature:

```

IKE SA DSCP: 0x23

```

**Table 2: show crypto template Command Output Descriptions**

Field	Description
IKE SA DSCP	Configured DSCP value to be included in the IKEv2 packets for the crypto template.