

## Selective Packet Discard

When the input queue of an interface fills up with traffic destined to the router, there's a good chance that the next packet dropped will be important to the state of the network itself—a routing protocol update or a link keepalive, for instance. Selective Packet Discard (SPD) allows IOS to prioritize traffic that is important to the network's stability when an interface's input queue is congested.

Essentially, any packet recognized by IOS as being important to the stability of the network is given preferential treatment during the process of queuing it on the input queue. SPD is available on all Cisco routers.

The command **show ip spd** shows SPD details, as demonstrated in [Example 8-16](#).

### Example 8-16. *show ip spd* Displays SPD Details

```
Router#show ip spd Current mode: normal. Queue min/max thresholds: 73/74, Headroom: 100 IP normal
queue: 8, priority queue: 0. SPD special drop mode: none
```

Lower precedence packets are dropped when the queue size reaches *min threshold*. The number of packets allowed to be enqueued over the normal input hold queue is the *headroom*.

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## Index terms contained in this section

commands

[show ip spd](#)

[headroom](#)

QoS

[SPD \(Selective Packet Discard\) 2nd](#)

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