

Chapter 8

Configuring RED Drop Profiles

Random early detection (RED) drop profiles are associated with the forwarding classes and loss priorities from the scheduler-map you configure on the interface. To configure class-of-service (CoS) RED drop profiles, you can include the following statements at the [edit class-of-service] hierarchy level of the configuration:

```
class-of-service {
  drop-profiles {
    profile-name {
      fill-level percentage drop-probability percentage;
      interpolate {
        drop-probability [ values ];
        fill-level [ values ];
      }
    }
  }
}
```

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- Packet Loss Priority on page 86

Configuring RED Drop Profiles

To configure the drop profiles, include the `drop-profiles` statement at the [edit class-of-service] hierarchy level:

```
[edit class-of-service]
drop-profiles {
  profile-name {
    fill-level percentage drop-probability percentage;
    interpolate {
      drop-probability [ values ];
      fill-level [ values ];
    }
  }
}
```

In this configuration, include either the `interpolate` statement and its options, or the fill-level and drop-probability *percentage* values. These two alternatives enable you to configure either each drop probability at up to 64 fill-level/drop-probability paired values, or a profile represented as a series of line segments.

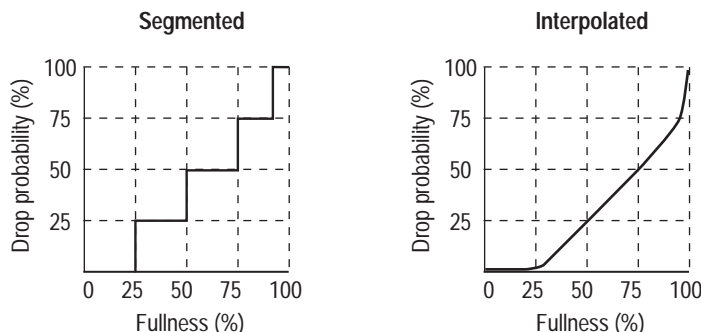


NOTE: If you configure the `interpolate` statement, you can specify more than 64 pairs, but the system generates only 64 discrete entries.

The line segments are defined in terms of the following graphical model: in the first quadrant, the x axis represents the fill level and the y axis represents the drop probability. The initial line segment spans from the origin (0,0) to the point (<l1 >, <p1 >); a second line runs from (<l1 >, <p1 >) to (<l2 >, <p2 >) and so forth, until a final line segment connects (100, 100). The system automatically constructs a drop profile containing 64 fill levels at drop probabilities that approximate the calculated line segments.

Figure 2 shows sample line graphs comparing use of the segment percentages (on the left) and interpolated values (on the right):

Figure 2: Segmented and Interpolated Drop Profiles



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Packet Loss Priority

The router supports two packet loss priority (PLP) designations, low and high.

The packet loss priority is used to determine the RED drop profile when queuing a packet. You can set it by configuring a classifier or policer.