

Configuring Drop Profiles

You configure drop profiles within scheduler actions. Drop profiles support the RED process by defining the drop probabilities across the range of delay-buffer occupancy. For a packet to be dropped, it must match the drop profile. When a packet arrives, RED checks the queue fill level. If the fill level corresponds to a nonzero drop probability, the RED algorithm determines whether to drop the arriving packet. Depending on the drop probabilities, RED might drop packets aggressively long before the buffer becomes full, or it might drop only a few packets even if the buffer is almost full.

In drop profiles you configure the queue threshold and drop probability as paired values. The values can be either percentage values (segmented) or data points (interpolated). These two alternatives enable you to configure each drop probability at up to 64 fill-level/drop-probability paired values, or to configure a profile represented as a series of line segments. For more information about configuring fill level and drop probabilities, see the JUNOS routing platform documentation.

Use the following configuration statements to configure drop profiles:

```
policies group name list name rule name scheduler-action name drop-profile
  name {
    loss-priority loss-priority ;
    protocol protocol ;
    drop-probability drop-probability ;
    drop-profile-type drop-profile-type ;
    queue-threshold queue-threshold ;
  }
```

To configure drop profiles:

1. From configuration mode, enter the drop profile configuration. For example, in this procedure, drop1 is the name of the drop profile.

```
user@host# edit policies group junos list qosWithDropProfile rule pr
scheduler-action sa drop-profile drop1
```

2. Configure the loss priority.

```
[edit policies group junos list qosWithDropProfile rule pr scheduler-action sa
drop-profile drop1]
user@host# set loss-priority loss-priority
```

3. Configure the protocol type.

```
[edit policies group junos list qosWithDropProfile rule pr scheduler-action sa
drop-profile drop1]
user@host# set protocol protocol
```

4. Configure the relationship between the fill level and drop probability.

```
[edit policies group junos list qosWithDropProfile rule pr scheduler-action sa
drop-profile drop1]
user@host# set drop-profile-type drop-profile-type
```

5. Configure the probability that a packet will be dropped.

```
[edit policies group junos list qosWithDropProfile rule pr scheduler-action sa
 drop-profile drop1]
user@host# set drop-probability drop-probability
```

6. Configure the fill level of the queue.

```
[edit policies group junos list qosWithDropProfile rule pr scheduler-action sa
 drop-profile drop1]
user@host# set queue-threshold queue-threshold
```

7. (Optional) Verify the drop profile configuration.

```
[edit policies group junos list qosWithDropProfile rule pr scheduler-action
 sa drop-profile drop1]
user@host# show
loss-priority high_priority;
protocol any_protocol;
drop-probability "[75, 100]";
drop-profile-type interpolated;
queue-threshold "[50, 80]";
```