

## [edit class-of-service] Hierarchy Level

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This topic shows the complete configuration for class of service (CoS) statements for the [edit class-of-services] hierarchy level, listing all possible configuration statements and showing their level in the configuration hierarchy. When you are configuring the JUNOS Software, your current hierarchy level is shown in the banner on the line preceding the `user@host#` prompt.

For a complete list of the JUNOS configuration statements, see the *JUNOS Hierarchy and RFC Reference*.

```
[edit class-of-service]
classifiers {
  (dscp | dscp-ipv6 | exp | ieee-802.1 | inet-precedence) classifier-name {
    import (classifier-name | default);
    forwarding-class class-name {
      loss-priority level code-points [ aliases ] [ bit-patterns ];
    }
  }
}
code-point-aliases {
  (dscp | dscp-ipv6 | exp | ieee-802.1 | inet-precedence) {
    alias-name bits;
  }
}
drop-profiles {
  profile-name {
    fill-level percentage drop-probability percentage;
    interpolate {
      drop-probability [ values ];
      fill-level [ values ];
    }
  }
}
fabric {
  scheduler-map {
    priority (high | low) scheduler scheduler-name;
  }
}
forwarding-classes {
  class class-name queue-num queue-number priority (high | low);
  queue queue-number class-name priority (high | low) [ policing-priority (high | low) ];
}
forwarding-classes-interface-specific forwarding-class-map-name {
  class class-name queue-num queue-number [ restricted-queue queue-number ];
}
forwarding-policy {
  next-hop-map map-name {
    forwarding-class class-name {
      next-hop [ next-hop-name ];
      lsp-next-hop [ lsp-regular-expression ];
      non-lsp-next-hop;
      discard;
    }
  }
}
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    }
  }
  class class-name {
    classification-override {
      forwarding-class class-name;
    }
  }
}
fragmentation-maps {
  map-name {
    forwarding-class class-name {
      drop-timeout milliseconds;
      fragment-threshold bytes;
      multilink-class number;
      no-fragmentation;
    }
  }
}
host-outbound-traffic {
  forwarding-class class-name;
  dscp-code-point value;
}
interfaces {
  interface-name {
    input-scheduler-map map-name;
    input-shaping-rate rate;
    irb {
      unit logical-unit-number {
        classifiers {
          type (classifier-name | default) family (mpls | all);
        }
        rewrite-rules {
          dscp (rewrite-name | default);
          dscp-ipv6 (rewrite-name | default);
          exp (rewrite-name | default) protocol protocol-types;
          ieee-802.1 (rewrite-name | default) vlan-tag (outer | outer-and-inner);
          inet-precedence (rewrite-name | default);
        }
      }
    }
  }
  output-forwarding-class-map forwarding-class-map-name;
  member-link-scheduler (replicate | scale);
  scheduler-map map-name;
  scheduler-map-chassis map-name;
  shaping-rate rate;
  unit logical-unit-number {
    classifiers {
      (dscp | dscp-ipv6 | exp | ieee-802.1 | inet-precedence) (classifier-name |
      default) family (mpls | inet);
    }
    forwarding-class class-name;
    fragmentation-map map-name;
    input-scheduler-map map-name;
    input-shaping-rate (percent percentage | rate);
    input-traffic-control-profile profile-name shared-instance instance-name;
    output-traffic-control-profile profile-name shared-instance instance-name;
  }
}

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per-session-scheduler;
rewrite-rules {
    dscp (rewrite-name | default)protocol protocol-types;
    dscp-ipv6 (rewrite-name | default);
    exp (rewrite-name | default)protocol protocol-types;
    exp-push-push-push default;
    exp-swap-push-push default;
    ieee-802.1 (rewrite-name | default) vlan-tag (outer | outer-and-inner);
    inet-precedence (rewrite-name | default)protocol protocol-types;
}
scheduler-map map-name;
shaping-rate rate;
translation-table (to-dscp-from-dscp | to-dscp-ipv6-from-dscp-ipv6 | to-exp-from-exp
| to-inet-precedence-from-inet-precedence) table-name;
}
}
restricted-queues {
    forwarding-class class-name queue queue-number;
}
rewrite-rules {
    (dscp | dscp-ipv6 | exp | ieee-802.1 | inet-precedence) rewrite-name {
        import (rewrite-name | default);
        forwarding-class class-name {
            loss-priority level code-point (alias | bits);
        }
    }
}
routing-instances routing-instance-name {
    classifiers {
        exp (classifier-name | default);
        dscp (classifier-name | default);
        dscp-ipv6 (classifier-name | default);
    }
}
scheduler-maps {
    map-name {
        forwarding-class class-name scheduler scheduler-name;
    }
}
schedulers {
    scheduler-name {
        buffer-size (percent percentage | remainder | temporal microseconds);
        drop-profile-map loss-priority (any | low | medium-low | medium-high | high)protocol
            (any | non-tcp | tcp) drop-profile profile-name;
        excess-priority (low | high);
        excess-rate percent percentage;
        priority priority-level;
        transmit-rate (rate | percent percentage | remainder) <exact | rate-limit>;
    }
}
traffic-control-profiles profile-name {
    delay-buffer-rate (percent percentage | rate);
    excess-rate (percent percentage | proportion value);
    guaranteed-rate (percent percentage | rate);
    overhead-accounting (frame-mode | cell-mode) <bytes byte-value>;
}

```

```

scheduler-map map-name;
shaping-rate (percent percentage | rate);
}
translation-table {
  (to-dscp-from-dscp | to-dscp-ipv6-from-dscp-ipv6 | to-exp-from-exp |
  to-inet-precedence-from-inet-precedence) table-name {
    to-code-point value from-code-points (* | [ values ]);
  }
}
}
tri-color;

```

On a Juniper Networks MX Series Ethernet Services Routers with Enhanced Queuing DPCs, you can configure the following CoS statements at the [edit class-of-service interfaces] hierarchy level:

```

interface-set interface-set-name {
  excess-bandwidth-share (proportional value | equal);
  internal-node;
  traffic-control-profiles profile-name;
  output-traffic-control-profile-remaining profile-name;
}

```

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