

# Chapter 2

## Complete MPLS Applications Configuration Mode Statements

This chapter shows the complete configuration statement hierarchy for the MPLS applications configuration statements, 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 Internet Software Configuration Guide: Getting Started*.

This chapter is organized as follows:

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## [edit protocols connections] Hierarchy Level

```
protocols {
  connections {
    interface-switch connection-name {
      interface interface-name.unit-number;
      interface interface-name.unit-number;
    }
    lsp-switch connection-name {
      transmit-lsp label-switched-path;
      receive-lsp label-switched-path;
    }
    remote-interface-switch connection-name {
      interface interface-name.unit-number;
      transmit-lsp label-switched-path;
      receive-lsp label-switched-path;
    }
  }
}
```

## [edit protocols ldp] Hierarchy Level

```
protocols {
  ldp {
    deaggregate | no-deaggregate;
    egress-policy policy-name;
    export [ policy-name ];
    graceful-restart {
      disable;
      helper-disable;
      maximum-recovery-time seconds;
      recovery-time seconds;
    }
    import [policy-name];
    interface interface-name {
      disable;
      hello-interval seconds;
      hold-time seconds;
      transport-address (interface | loopback);
    }
    keepalive-interval seconds;
    keepalive-timeout seconds;
    no-forwarding;
    preference preference;
    session address {
      authentication-key authentication-key;
    }
    traceoptions {
      file filename <replace> <size size> <files number> <no-stamp>
        <(world-readable | no-world-readable)>;
      flag flag <flag-modifier> <disable>;
    }
    track-igp-metric;
    traffic-statistics {
      file filename <replace> <size size> <files number> <(world-readable | no-world-readable)>;
      interval interval;
    }
    transport-address (router-id | loopback);
  }
}
```

```

    }
}

```

## [edit protocols link-management] Hierarchy Level

```

protocols {
  link-management {
    te-link te-link-name {
      local-address ipv4-address;
      remote-address ipv4-address;
      remote-id number;
      interface interface-name {
        remote-id number;
        local-address ipv4-address;
        remote-address ipv4-address;
      }
    }
  }
}

```

## [edit protocols mpls] Hierarchy Level

```

protocols {
  mpls {
    admin-groups {
      group-name group-value;
    }
    bandwidth bandwidth;
    class-of-service cos-value;
    disable;
    hop-limit number;
    ipv6-tunneling;
    log-updown {
      (syslog | no-syslog);
      (trap | no-trap);
    }
    no-cspf;
    no-decrement-ttl;
    no-propagate-ttl;
    no-record;
    optimize-aggressive;
    optimize-timer;
    path path-name {
      address <strict | loose>;
    }
    preference preference;
    priority setup-priority hold-priority;
    record;
    rsvp-error-hold-time seconds;
    standby;
    statistics {
      auto-bandwidth;
      file filename size size files number <no-stamp>;
      interval seconds;
    }
    traceoptions {
      file filename <replace> <size size> <files number> <no-stamp>

```

```

    <(world-readable | no-world-readable)>;
    flag flag <flag-modifier> <disable>;
}
traffic-engineering (bgp | bgp-igp | bgp-igp-both-ribs | mpls-forwarding);
label-switched-path lsp-path-name {
    adaptive;
    admin-group {
        exclude group-names;
        include group-names;
    }
    auto-bandwidth {
        adjust-interval seconds;
        maximum-bandwidth bps;
        minimum-bandwidth bps;
        monitor-bandwidth;
    }
    bandwidth bps;
    class-of-service cos-value;
    description;
    disable;
    fast-reroute {
        bandwidth bps;
        (exclude group-names | no-exclude);
        hop-limit number;
        (include group-names | no-include);
    }
    from address;
    hop-limit number;
    install {
        destination-prefix/prefix-length <active>;
    }
    ldp-tunneling;
    link-protection;
    lsp-attributes {
        gpid gpid;
        signal-bandwidth type;
        switching-type type;
    }
    metric number;
    no-cspf;
    no-decrement-ttl;
    node-link-protection;
    optimize-timer seconds;
    preference preference;
    priority setup-priority hold-priority;
    (random | least-fill | most-fill);
    (record | no-record);
    retry-limit number;
    retry-timer seconds;
    standby;
    traceoptions {
        file filename <replace> <size size> <files number> <no-stamp>
            <(world-readable | no-world-readable)>;
        flag flag <flag-modifier> <disable>;
    }
}
primary path-name {
    adaptive;
    admin-group {
        exclude group-names;
        include group-names;
    }
}

```

```

    }
    bandwidth bps;
    class-of-service cos-value;
    hop-limit number;
    no-cspf;
    no-decrement-ttl;
    optimize-timer seconds;
    preference preference;
    priority setup-priority hold-priority;
    (record | no-record);
    standby;
  }
  secondary path-name {
    adaptive;
    admin-group {
      exclude group-names;
      include group-names;
    }
    bandwidth bps;
    class-of-service cos-value;
    hop-limit number;
    no-cspf;
    no-decrement-ttl;
    optimize-timer seconds;
    preference preference;
    priority setup-priority hold-priority;
    (record | no-record);
    standby;
  }
  to address;
}
interface (interface-name | all) {
  disable;
  admin-group {
    group-name;
  }
  label-map in-label {
    class-of-service value;
    (next-hop (address | interface-name | address/interface-name)) | (reject | discard);
    (pop | (swap <out-label>));
    preference preference;
    type type;
  }
}
static-path inet {
  prefix {
    class-of-service value;
    next-hop (address | interface-name | address/interface-name);
    push out-label;
    preference preference;
  }
}
}
}
}

```

[edit protocols rsvp] Hierarchy Level

protocols {

```
rsvp {
  disable;
  graceful-restart {
    disable;
    helper-disable;
  }
  keep-multiplier number;
  preemption (aggressive | disabled | normal);
  refresh-time seconds;
  traceoptions {
    file filename <replace> <size size> <files number> <no-stamp>
      <(world-readable | no-world-readable)>;
    flag flag <flag-modifier> <disable>;
  }
  interface interface-name {
    disable;
    (aggregate | no-aggregate);
    authentication-key key;
    bandwidth bps;
    hello-interval seconds;
    link-protection (RSVP) {
      bandwidth bandwidth;
      class-of-service value;
      disable;
      path address <strict | loose>;
    }
    subscription percentage;
  }
}
```