

Chapter 6

Tag Elements Beginning with F

This chapter lists the configuration tag elements that have names beginning with the letter *f*. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page cdv.

For information about the tag elements that client applications use to request, change, and commit configuration information, see the *JUNOScript API Guide* and *NETCONF API Guide*.



NOTE: Every tag element in this chapter optionally accepts the `<apply-groups>` or `<apply-groups-except>` tag element and the `<apply-macro>` tag element as children. For brevity, the reference entries do not list these tag elements as children. For information about these tag elements, see `<apply-groups>` on page 606, `<apply-groups-except>` on page 606, and `<apply-macro>` on page 607.

`<fabric>` (configuration/chassis)

Usage	<code><configuration></code> <code><chassis></code> <code><fabric></code> <code><upgrade-mode/></code> <code></fabric></code> <code></chassis></code> <code></configuration></code>
Description	Switch fabric settings.
Contents	<code><upgrade-mode></code> —Enable online switch fabric upgrade.

<fabric> (configuration/class-of-service)

Usage	<pre> <configuration> <class-of-service> <fabric> <scheduler-map>...</scheduler-map> </fabric> </class-of-service> </configuration> </pre>
Description	Define CoS parameters of switch fabric.
Contents	<scheduler-map>—Mapping of fabric traffic to packet schedulers.

<fabric> (configuration/dynamic-profiles/class-of-service)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <fabric> <scheduler-map>...</scheduler-map> </fabric> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Define CoS parameters of switch fabric.
Contents	<scheduler-map>—Mapping of fabric traffic to packet schedulers.

<fabric-options> (configuration/dynamic-profiles/interfaces/interface)

Usage	<pre> <configuration> <dynamic-profiles> <interfaces> <interface> <fabric-options> <member-interfaces>...</member-interfaces> </fabric-options> </interface> </interfaces> </dynamic-profiles> </configuration> </pre>
Description	Fabric interface specific options.
Contents	<member-interfaces>—Member interface for the fabric interface.

<fabric-options> (configuration/interfaces/interface)

- Usage** <configuration>
 <interfaces>
 <interface>
 <fabric-options>
 <member-interfaces>...</member-interfaces>
 </fabric-options>
 </interface>
 </interfaces>
 </configuration>
- Description** Fabric interface specific options.
- Contents** <member-interfaces>—Member interface for the fabric interface.

<failover> (configuration/chassis/redundancy)

- Usage** <configuration>
 <chassis>
 <redundancy>
 <failover>
 <on-loss-of-keepalives/>
 <on-disk-failure/>
 </failover>
 </redundancy>
 </chassis>
 </configuration>
- Description** Failover to other Routing Engine.
- Contents** <on-disk-failure>—Failover on disk failure.
 <on-loss-of-keepalives>—Failover on loss of keepalives.

<failure> (configuration/services/ggsn/apn/service-based-charging/credit-control/ro-profile)

Usage <configuration>
 <services>
 <ggsn>
 <apn>
 <service-based-charging>
 <credit-control>
 <ro-profile>
 <failure>
 <failure-action>*failure-action-choice*</failure-action>
 <continue>...</continue>
 </failure>
 </ro-profile>
 </credit-control>
 </service-based-charging>
 </apn>
 </ggsn>
 </services>
 </configuration>

Description Failure handling settings for ro.

Contents <continue>—Settings for handling continue.

 <failure-action>—Failure action settings.

- continue—Retry once, and then continue context without credit control.
- retry-and-terminate—Retry once, and then terminate context.
- terminate—Terminate context.

<failure-action> (configuration/logical-systems/protocols/mpls/label-switched-path/oam/bfd-liveness-detection)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<failure-action> (configuration/logical-systems/protocols/mpls/label-switched-path/primary/oam/bfd-liveness-detection)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<failure-action> (configuration/logical-systems/protocols/mpls/label-switched-path/secondary/oam/bfd-liveness-detection)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<failure-action> (configuration/logical-systems/protocols/mpls/oam/bfd-liveness-detection)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<failure-action> (configuration/protocols/mpls/ label-switched-path/oam/bfd-liveness-detection)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<failure-action> (configuration/protocols/mpls/ label-switched-path/primary/oam/bfd-liveness-detection)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<failure-action> (configuration/protocols/mpls/label-switched-path/secondary/oam/bfd-liveness-detection)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<failure-action> (configuration/protocols/mpls/oam/bfd-liveness-detection)

Usage <configuration>
 <protocols>
 <mpls>
 <oam>
 <bfd-liveness-detection>
 <failure-action>
 <teardown/>
 </failure-action>
 </bfd-liveness-detection>
 </oam>
 </mpls>
 </protocols>
 </configuration>

Description Action to take when BFD session goes down.

Contents <teardown>—Teardown label switched path and resignal.

<family> (configuration/access/address-assignment/pool)

Usage <configuration>
 <access>
 <address-assignment>
 <pool>
 <family>
 <inet>...</inet>
 </family>
 </pool>
 </address-assignment>
 </access>
 </configuration>

Description Address family.

Contents <inet>—No documentation is available yet.

<family> (configuration/dynamic-profiles/interfaces/interface/unit)

Usage

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>...</inet>
            <iso>...</iso>
            <inet6>...</inet6>
            <mpls>...</mpls>
            <mlppp>...</mlppp>
            <mlfr-end-to-end>...</mlfr-end-to-end>
            <mlfr-uni-nni>...</mlfr-uni-nni>
            <ccc>...</ccc>
            <tcc>...</tcc>
            <vpls>...</vpls>
            <bridge>...</bridge>
            <ethernet-switching>...</ethernet-switching>
            <any>...</any>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

Description Protocol family.

Contents

- <any>—Parameters for 'any' family.
- <bridge>—Layer-2 bridging parameters.
- <ccc>—Circuit cross-connect parameters.
- <ethernet-switching>—Ethernet switching parameters.
- <inet>—IPv4 parameters.
- <inet6>—IPv6 protocol parameters.
- <iso>—OSI ISO protocol parameters.
- <mlfr-end-to-end>—Multilink Frame Relay end-to-end protocol parameters.
- <mlfr-uni-nni>—Multilink Frame Relay UNI NNI protocol parameters.
- <mlppp>—Multilink PPP protocol parameters.

- <mpls>—MPLS protocol parameters.
- <tcc>—Translational cross-connect parameters.
- <vpls>—Virtual private LAN service parameters.

<family> (configuration/firewall)

Usage	<pre><configuration> <firewall> <family> <inet>...</inet> <inet6>...</inet6> <mpls>...</mpls> <vpls>...</vpls> <bridge>...</bridge> <ccc>...</ccc> <any>...</any> <ethernet-switching>...</ethernet-switching> </family> </firewall> </configuration></pre>
Description	Protocol family.
Contents	<p><any>—Protocol-independent filter.</p> <p><bridge>—Protocol family BRIDGE for firewall filter.</p> <p><ccc>—Protocol family CCC for firewall filter.</p> <p><ethernet-switching>—Protocol family Ethernet Switching for firewall filter.</p> <p><inet>—Protocol family IPv4 for firewall filter.</p> <p><inet6>—Protocol family IPv6 for firewall filter.</p> <p><mpls>—Protocol family MPLS for firewall filter.</p> <p><vpls>—Protocol family VPLS for firewall filter.</p>

<family> (configuration/forwarding-options)

Usage	<pre> <configuration> <forwarding-options> <family> <inet>...</inet> <inet6>...</inet6> <mpls>...</mpls> <vpls>...</vpls> </family> </forwarding-options> </configuration> </pre>
Description	Protocol family.
Contents	<pre> <inet>—IPv4 parameters. <inet6>—IPv6 parameters. <mpls>—MPLS parameters. <vpls>—VPLS parameters. </pre>

<family> (configuration/forwarding-options/hash-key)

Usage	<pre> <configuration> <forwarding-options> <hash-key> <family> <inet>...</inet> <mpls>...</mpls> <multiservice>...</multiservice> </family> </hash-key> </forwarding-options> </configuration> </pre>
Description	Protocol family.
Contents	<pre> <inet>—IPv4 protocol family. <mpls>—MPLS protocol family. <multiservice>—Multiservice protocol family. </pre>

<family> (configuration/forwarding-options/monitoring)

Usage	<pre> <configuration> <forwarding-options> <monitoring> <family> <inet>...</inet> </family> </monitoring> </forwarding-options> </configuration> </pre>
Description	Address family of packets to monitor.
Contents	<inet>—Monitor IPv4 packets.

<family> (configuration/forwarding-options/port-mirroring)

Usage	<pre> <configuration> <forwarding-options> <port-mirroring> <family> <inet>...</inet> <inet6>...</inet6> <vpls>...</vpls> </family> </port-mirroring> </forwarding-options> </configuration> </pre>
Description	Address family of packets to mirror.
Contents	<inet>—Mirror IPv4 packets. <inet6>—Mirror IPv6 packets. <vpls>—Mirror Layer-2 bridged/vpls packets.

<family> (configuration/forwarding-options/port-mirroring/instance)

Usage	<pre> <configuration> <forwarding-options> <port-mirroring> <instance> <family> <inet>...</inet> <inet6>...</inet6> <vpls>...</vpls> </family> </instance> </port-mirroring> </forwarding-options> </configuration> </pre>
Description	Address family of packets to mirror.
Contents	<p><inet>—Mirror IPv4 packets.</p> <p><inet6>—Mirror IPv6 packets.</p> <p><vpls>—Mirror Layer-2 bridged/vpls packets.</p>

<family> (configuration/forwarding-options/sampling/input)

Usage	<pre> <configuration> <forwarding-options> <sampling> <input> <family> <inet>...</inet> <mpls>...</mpls> </family> </input> </sampling> </forwarding-options> </configuration> </pre>
Description	Protocol family.
Contents	<p><inet>—Sampling parameters for IPv4.</p> <p><mpls>—Sampling parameters for MPLS.</p>

<family> (configuration/interfaces/interface/unit)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>...</inet>
 <iso>...</iso>
 <inet6>...</inet6>
 <mpls>...</mpls>
 <mlppp>...</mlppp>
 <mlfr-end-to-end>...</mlfr-end-to-end>
 <mlfr-uni-nni>...</mlfr-uni-nni>
 <ccc>...</ccc>
 <tcc>...</tcc>
 <vpls>...</vpls>
 <bridge>...</bridge>
 <ethernet-switching>...</ethernet-switching>
 <any>...</any>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Protocol family.

Contents <any>—Parameters for 'any' family.

<bridge>—Layer-2 bridging parameters.

<ccc>—Circuit cross-connect parameters.

<ethernet-switching>—Ethernet switching parameters.

<inet>—IPv4 parameters.

<inet6>—IPv6 protocol parameters.

<iso>—OSI ISO protocol parameters.

<mlfr-end-to-end>—Multilink Frame Relay end-to-end protocol parameters.

<mlfr-uni-nni>—Multilink Frame Relay UNI NNI protocol parameters.

<mlppp>—Multilink PPP protocol parameters.

<mpls>—MPLS protocol parameters.

<tcc>—Translational cross-connect parameters.

<vpls>—Virtual private LAN service parameters.

<family> (configuration/logical-systems/access/address-assignment/pool)

Usage <configuration>
 <logical-systems>
 <access>
 <address-assignment>
 <pool>
 <family>
 <inet>...</inet>
 </family>
 </pool>
 </address-assignment>
 </access>
 </logical-systems>
 </configuration>

Description Address family.

Contents <inet>—No documentation is available yet.

<family> (configuration/logical-systems/firewall)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <mpls>...</mpls>
 <vpls>...</vpls>
 <bridge>...</bridge>
 <ccc>...</ccc>
 <any>...</any>
 <ethernet-switching>...</ethernet-switching>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Protocol family.

Contents <any>—Protocol-independent filter.

<bridge>—Protocol family BRIDGE for firewall filter.

<ccc>—Protocol family CCC for firewall filter.

<ethernet-switching>—Protocol family Ethernet Switching for firewall filter.

<inet>—Protocol family IPv4 for firewall filter.

<inet6>—Protocol family IPv6 for firewall filter.

<mpls>—Protocol family MPLS for firewall filter.

<vpls>—Protocol family VPLS for firewall filter.

<family> (configuration/logical-systems/interfaces/interface/unit)

Usage

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>...</inet>
            <iso>...</iso>
            <inet6>...</inet6>
            <mpls>...</mpls>
            <mlppp>...</mlppp>
            <mlfr-end-to-end>...</mlfr-end-to-end>
            <mlfr-uni-nni>...</mlfr-uni-nni>
            <ccc>...</ccc>
            <tcc>...</tcc>
            <vpls>...</vpls>
            <bridge>...</bridge>
            <ethernet-switching>...</ethernet-switching>
            <any>...</any>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

Description Protocol family.

Contents <any>—Parameters for 'any' family.

<bridge>—Layer-2 bridging parameters.

<ccc>—Circuit cross-connect parameters.

<ethernet-switching>—Ethernet switching parameters.

<inet>—IPv4 parameters.

<inet6>—IPv6 protocol parameters.

<iso>—OSI ISO protocol parameters.

<mlfr-end-to-end>—Multilink Frame Relay end-to-end protocol parameters.

<mlfr-uni-nni>—Multilink Frame Relay UNI NNI protocol parameters.

<mlppp>—Multilink PPP protocol parameters.

<mpls>—MPLS protocol parameters.

<tcc>—Translational cross-connect parameters.

<vpls>—Virtual private LAN service parameters.

<family> (configuration/logical-systems/protocols/bgp)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/logical-systems/protocols/bgp/group)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
<family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
</family>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/logical-systems/protocols/bgp/group/neighbor)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/logical-systems/protocols/isis/traffic-engineering)

Usage <configuration>
 <logical-systems>
 <protocols>
 <isis>
 <traffic-engineering>
 <family>
 <name>name</name> <!-- identifier -->
 <shortcuts>...</shortcuts>
 </family>
 </traffic-engineering>
 </isis>
 </protocols>
 </logical-systems>
 </configuration>

Description Address family specific traffic-engineering attributes.

Contents <name>—No documentation is available yet.

■ inet—IPv4 family.

■ inet6—IPv6 family.

<shortcuts>—Use label-switched paths as next hops, if possible.

<family> (configuration/logical-systems/protocols/pim/rp/bootstrap)

Usage <configuration>
 <logical-systems>
 <protocols>
 <pim>
 <rp>
 <bootstrap>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </bootstrap>
 </rp>
 </pim>
 </protocols>
 </logical-systems>
 </configuration>

Description Bootstrap address family.

Contents <inet>—IPv4 bootstrap properties.

<inet6>—IPv6 bootstrap properties.

<family> (configuration/logical-systems/protocols/pim/rp/local)

Usage <configuration>
 <logical-systems>
 <protocols>
 <pim>
 <rp>
 <local>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </local>
 </rp>
 </pim>
 </protocols>
 </logical-systems>
 </configuration>

Description Local RP address family.

Contents <inet>—IPv4 local RP properties.
 <inet6>—IPv6 local RP properties.

<family> (configuration/logical-systems/routing-instances/instance/access/address-assignment/pool)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <access>
 <address-assignment>
 <pool>
 <family>
 <inet>...</inet>
 </family>
 </pool>
 </address-assignment>
 </access>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Address family.

Contents <inet>—No documentation is available yet.

**<family> (configuration/logical-systems/routing-instances/
instance/forwarding-options)**

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <mpls>...</mpls>
 <vpls>...</vpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Protocol family.

Contents <inet>—IPv4 parameters.

 <inet6>—IPv6 parameters.

 <mpls>—MPLS parameters.

 <vpls>—VPLS parameters.

<family> (configuration/logical-systems/routing-instances/instance/forwarding-options/hash-key)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <forwarding-options> <hash-key> <family> <inet>...</inet> <mpls>...</mpls> <multiservice>...</multiservice> </family> </hash-key> </forwarding-options> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	Protocol family.
Contents	<p><inet>—IPv4 protocol family.</p> <p><mpls>—MPLS protocol family.</p> <p><multiservice>—Multiservice protocol family.</p>

<family> (configuration/logical-systems/routing-instances/instance/forwarding-options/monitoring)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <forwarding-options> <monitoring> <family> <inet>...</inet> </family> </monitoring> </forwarding-options> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	Address family of packets to monitor.
Contents	<inet>—Monitor IPv4 packets.

**<family> (configuration/logical-systems/routing-instances/
instance/forwarding-options/port-mirroring)**

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <port-mirroring>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <vpls>...</vpls>
 </family>
 </port-mirroring>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Address family of packets to mirror.

Contents <inet>—Mirror IPv4 packets.

 <inet6>—Mirror IPv6 packets.

 <vpls>—Mirror Layer-2 bridged/vpls packets.

<family> (configuration/logical-systems/routing-instances/instance/forwarding-options/port-mirroring/instance)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <port-mirroring>
 <instance>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <vpls>...</vpls>
 </family>
 </instance>
 </port-mirroring>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Address family of packets to mirror.

Contents <inet>—Mirror IPv4 packets.
 <inet6>—Mirror IPv6 packets.
 <vpls>—Mirror Layer-2 bridged/vpls packets.

**<family> (configuration/logical-systems/routing-instances/
instance/forwarding-options/sampling/input)**

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <sampling>
 <input>
 <family>
 <inet>...</inet>
 <mpls>...</mpls>
 </family>
 </input>
 </sampling>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Protocol family.

Contents <inet>—Sampling parameters for IPv4.
 <mpls>—Sampling parameters for MPLS.

<family> (configuration/logical-systems/routing-instances/instance/protocols/bgp)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/logical-systems/routing-instances/instance/protocols/isis/traffic-engineering)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traffic-engineering>
 <family>
 <name>*name*</name> <!-- identifier -->
 <shortcuts>...</shortcuts>
 </family>
 </traffic-engineering>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Address family specific traffic-engineering attributes.

Contents <name>—No documentation is available yet.

- inet—IPv4 family.
- inet6—IPv6 family.

<shortcuts>—Use label-switched paths as next hops, if possible.

**<family> (configuration/logical-systems/routing-instances/
instance/protocols/pim/rp/bootstrap)**

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <rp>
 <bootstrap>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </bootstrap>
 </rp>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Bootstrap address family.

Contents <inet>—IPv4 bootstrap properties.
 <inet6>—IPv6 bootstrap properties.

<family> (configuration/logical-systems/routing-instances/instance/protocols/pim/rp/local)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <rp>
 <local>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </local>
 </rp>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Local RP address family.

Contents <inet>—IPv4 local RP properties.
 <inet6>—IPv6 local RP properties.

<family> (configuration/logical-systems/routing-instances/instance/routing-options/auto-export)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <iso>...</iso>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description No documentation is available yet.

Contents <inet>—IPv4 parameters.
 <inet6>—IPv6 parameters.
 <iso>—ISO parameters.

<family> (configuration/logical-systems/routing-instances/instance/routing-options/interface-routes)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <interface-routes>
 <family>
 <name>name</name> <!-- identifier -->
 <import>...</import>
 <export>...</export>
 </family>
 </interface-routes>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Address family.

Contents <export>—Control exportability of local routes.

 <import>—Import policy.

 <name>—No documentation is available yet.

■ inet—IPv4 family.

■ inet6—IPv6 family.

<family> (configuration/logical-systems/routing-instances/instance/routing-options/topologies)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <topologies>
 <family>
 <name>*name*</name> <!-- identifier -->
 <topology>...</topology>
 </family>
 </topologies>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Address family.

Contents <name>—No documentation is available yet.

- inet—IPv4 family.
- inet6—IPv6 family.

<topology>—Topology information.

<family> (configuration/logical-systems/routing-options/auto-export)

Usage	<pre> <configuration> <logical-systems> <routing-options> <auto-export> <family> <inet>...</inet> <inet6>...</inet6> <iso>...</iso> </family> </auto-export> </routing-options> </logical-systems> </configuration> </pre>
Description	No documentation is available yet.
Contents	<p><inet>—IPv4 parameters.</p> <p><inet6>—IPv6 parameters.</p> <p><iso>—ISO parameters.</p>

<family> (configuration/logical-systems/routing-options/interface-routes)

Usage	<pre> <configuration> <logical-systems> <routing-options> <interface-routes> <family> <name>name</name> <!-- identifier --> <import>...</import> <export>...</export> </family> </interface-routes> </routing-options> </logical-systems> </configuration> </pre>
Description	Address family.
Contents	<p><export>—Control exportability of local routes.</p> <p><import>—Import policy.</p> <p><name>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ inet—IPv4 family. ■ inet6—IPv6 family.

<family> (configuration/logical-systems/routing-options/topologies)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <topologies>
 <family>
 <name>name</name> <!-- identifier -->
 <topology>...</topology>
 </family>
 </topologies>
 </routing-options>
 </logical-systems>
 </configuration>

Description Address family.

Contents <name>—No documentation is available yet.

- inet—IPv4 family.
- inet6—IPv6 family.

<topology>—Topology information.

<family> (configuration/protocols/bgp)

Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </bgp>
 </protocols>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/protocols/bgp/group)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/protocols/bgp/group/neighbor)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Protocol family for NLRI in updates.

Contents <inet>—IPv4 NLRI parameters.

 <inet-mvpn>—IPv4 MVPN NLRI parameters.

 <inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

 <inet6>—IPv6 NLRI parameters.

 <inet6-mvpn>—IPv6 MVPN NLRI parameters.

 <inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

 <iso-vpn>—ISO Layer 3 VPN NLRI parameters.

 <l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

 <route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/protocols/isis/traffic-engineering)

Usage	<pre> <configuration> <protocols> <isis> <traffic-engineering> <family> <name>name</name> <!-- identifier --> <shortcuts>...</shortcuts> </family> </traffic-engineering> </isis> </protocols> </configuration> </pre>
Description	Address family specific traffic-engineering attributes.
Contents	<p><name>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ inet—IPv4 family. ■ inet6—IPv6 family. <p><shortcuts>—Use label-switched paths as next hops, if possible.</p>

<family> (configuration/protocols/pim/rp/bootstrap)

Usage	<pre> <configuration> <protocols> <pim> <rp> <bootstrap> <family> <inet>...</inet> <inet6>...</inet6> </family> </bootstrap> </rp> </pim> </protocols> </configuration> </pre>
Description	Bootstrap address family.
Contents	<p><inet>—IPv4 bootstrap properties.</p> <p><inet6>—IPv6 bootstrap properties.</p>

<family> (configuration/protocols/pim/rp/local)

Usage <configuration>
 <protocols>
 <pim>
 <rp>
 <local>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </local>
 </rp>
 </pim>
 </protocols>
 </configuration>

Description Local RP address family.

Contents <inet>—IPv4 local RP properties.
 <inet6>—IPv6 local RP properties.

<family> (configuration/routing-instances/instance/access/address-assignment/pool)

Usage <configuration>
 <routing-instances>
 <instance>
 <access>
 <address-assignment>
 <pool>
 <family>
 <inet>...</inet>
 </family>
 </pool>
 </address-assignment>
 </access>
 </instance>
 </routing-instances>
 </configuration>

Description Address family.

Contents <inet>—No documentation is available yet.

<family> (configuration/routing-instances/instance/forwarding-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <mpls>...</mpls>
 <vpls>...</vpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Protocol family.

Contents <inet>—IPv4 parameters.
 <inet6>—IPv6 parameters.
 <mpls>—MPLS parameters.
 <vpls>—VPLS parameters.

<family> (configuration/routing-instances/instance/forwarding-options/hash-key)

Usage	<pre> <configuration> <routing-instances> <instance> <forwarding-options> <hash-key> <family> <inet>...</inet> <mpls>...</mpls> <multiservice>...</multiservice> </family> </hash-key> </forwarding-options> </instance> </routing-instances> </configuration> </pre>
Description	Protocol family.
Contents	<p><inet>—IPv4 protocol family.</p> <p><mpls>—MPLS protocol family.</p> <p><multiservice>—Multiservice protocol family.</p>

<family> (configuration/routing-instances/instance/forwarding-options/monitoring)

Usage	<pre> <configuration> <routing-instances> <instance> <forwarding-options> <monitoring> <family> <inet>...</inet> </family> </monitoring> </forwarding-options> </instance> </routing-instances> </configuration> </pre>
Description	Address family of packets to monitor.
Contents	<inet>—Monitor IPv4 packets.

<family> (configuration/routing-instances/instance/forwarding-options/port-mirroring)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <port-mirroring>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <vpls>...</vpls>
 </family>
 </port-mirroring>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Address family of packets to mirror.

Contents <inet>—Mirror IPv4 packets.
 <inet6>—Mirror IPv6 packets.
 <vpls>—Mirror Layer-2 bridged/vpls packets.

**<family> (configuration/routing-instances/instance/
forwarding-options/port-mirroring/instance)**

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <port-mirroring>
 <instance>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <vpls>...</vpls>
 </family>
 </instance>
 </port-mirroring>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Address family of packets to mirror.

Contents <inet>—Mirror IPv4 packets.

 <inet6>—Mirror IPv6 packets.

 <vpls>—Mirror Layer-2 bridged/vpls packets.

<family> (configuration/routing-instances/instance/forwarding-options/sampling/input)

Usage	<pre> <configuration> <routing-instances> <instance> <forwarding-options> <sampling> <input> <family> <inet>...</inet> <mpls>...</mpls> </family> </input> </sampling> </forwarding-options> </instance> </routing-instances> </configuration> </pre>
Description	Protocol family.
Contents	<p><inet>—Sampling parameters for IPv4.</p> <p><mpls>—Sampling parameters for MPLS.</p>

<family> (configuration/routing-instances/instance/protocols/bgp)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/routing-instances/instance/protocols/bgp/group)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <inet6-vpn>...</inet6-vpn>
 <iso-vpn>...</iso-vpn>
 <l2vpn>...</l2vpn>
 <inet-mvpn>...</inet-mvpn>
 <inet6-mvpn>...</inet6-mvpn>
 <route-target>...</route-target>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents <inet>—IPv4 NLRI parameters.

<inet-mvpn>—IPv4 MVPN NLRI parameters.

<inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.

<inet6>—IPv6 NLRI parameters.

<inet6-mvpn>—IPv6 MVPN NLRI parameters.

<inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.

<iso-vpn>—ISO Layer 3 VPN NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.

<route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet>...</inet>
                <inet-vpn>...</inet-vpn>
                <inet6>...</inet6>
                <inet6-vpn>...</inet6-vpn>
                <iso-vpn>...</iso-vpn>
                <l2vpn>...</l2vpn>
                <inet-mvpn>...</inet-mvpn>
                <inet6-mvpn>...</inet6-mvpn>
                <route-target>...</route-target>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Protocol family for NLRIs in updates.

Contents

- <inet>—IPv4 NLRI parameters.
- <inet-mvpn>—IPv4 MVPN NLRI parameters.
- <inet-vpn>—IPv4 Layer 3 VPN NLRI parameters.
- <inet6>—IPv6 NLRI parameters.
- <inet6-mvpn>—IPv6 MVPN NLRI parameters.
- <inet6-vpn>—IPv6 Layer 3 VPN NLRI parameters.
- <iso-vpn>—ISO Layer 3 VPN NLRI parameters.
- <l2vpn>—MPLS-based Layer 2 VPN and VPLS NLRI parameters.
- <route-target>—Route target NLRI used for VPN route filtering.

<family> (configuration/routing-instances/instance/protocols/isis/traffic-engineering)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traffic-engineering>
 <family>
 <name>*name*</name> <!-- identifier -->
 <shortcuts>...</shortcuts>
 </family>
 </traffic-engineering>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Address family specific traffic-engineering attributes.

Contents <name>—No documentation is available yet.

- inet—IPv4 family.
- inet6—IPv6 family.

<shortcuts>—Use label-switched paths as next hops, if possible.

<family> (configuration/routing-instances/instance/protocols/pim/rp/bootstrap)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <rp>
 <bootstrap>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </bootstrap>
 </rp>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Bootstrap address family.

Contents <inet>—IPv4 bootstrap properties.
 <inet6>—IPv6 bootstrap properties.

<family> (configuration/routing-instances/instance/protocols/pim/rp/local)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <rp>
 <local>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </local>
 </rp>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Local RP address family.

Contents <inet>—IPv4 local RP properties.

 <inet6>—IPv6 local RP properties.

<family> (configuration/routing-instances/instance/routing-options/auto-export)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 <iso>...</iso>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description No documentation is available yet.

Contents <inet>—IPv4 parameters.

 <inet6>—IPv6 parameters.

 <iso>—ISO parameters.

<family> (configuration/routing-instances/instance/ routing-options/interface-routes)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <interface-routes>
 <family>
 <name>*name*</name> <!-- identifier -->
 <import>...</import>
 <export>...</export>
 </family>
 </interface-routes>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Address family.

Contents <export>—Control exportability of local routes.

 <import>—Import policy.

 <name>—No documentation is available yet.

- inet—IPv4 family.
- inet6—IPv6 family.

<family> (configuration/routing-instances/instance/routing-options/topologies)

Usage	<pre> <configuration> <routing-instances> <instance> <routing-options> <topologies> <family> <name>name</name> <!-- identifier --> <topology>...</topology> </family> </topologies> </routing-options> </instance> </routing-instances> </configuration> </pre>
Description	Address family.
Contents	<p><name>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ inet—IPv4 family. ■ inet6—IPv6 family. <p><topology>—Topology information.</p>

<family> (configuration/routing-options/auto-export)

Usage	<pre> <configuration> <routing-options> <auto-export> <family> <inet>...</inet> <inet6>...</inet6> <iso>...</iso> </family> </auto-export> </routing-options> </configuration> </pre>
Description	No documentation is available yet.
Contents	<p><inet>—IPv4 parameters.</p> <p><inet6>—IPv6 parameters.</p> <p><iso>—ISO parameters.</p>

<family> (configuration/routing-options/interface-routes)

Usage <configuration>
 <routing-options>
 <interface-routes>
 <family>
 <name>*name*</name> <!-- identifier -->
 <import>...</import>
 <export>...</export>
 </family>
 </interface-routes>
 </routing-options>
 </configuration>

Description Address family.

Contents <export>—Control exportability of local routes.

 <import>—Import policy.

 <name>—No documentation is available yet.

■ inet—IPv4 family.

■ inet6—IPv6 family.

<family> (configuration/routing-options/topologies)

Usage <configuration>
 <routing-options>
 <topologies>
 <family>
 <name>*name*</name> <!-- identifier -->
 <topology>...</topology>
 </family>
 </topologies>
 </routing-options>
 </configuration>

Description Address family.

Contents <name>—No documentation is available yet.

■ inet—IPv4 family.

■ inet6—IPv6 family.

 <topology>—Topology information.

<fast-reroute> (configuration/logical-systems/protocols/mpls/label-switched-path)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <fast-reroute>
 <hop-limit>*hop-limit*</hop-limit>
 <bandwidth>*bandwidth*</bandwidth>
 <bandwidth-percent>*bandwidth-percent*</bandwidth-percent>
 <no-include-any/>
 <include-any>...</include-any>
 <no-include-all/>
 <include-all>...</include-all>
 <no-exclude/>
 <exclude>...</exclude>
 </fast-reroute>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Fast reroute.

Contents <bandwidth>—Bandwidth to reserve (bps).
 <bandwidth-percent>—Percentage of main path bandwidth to reserve.
 <exclude>—Groups, all of which must be absent.
 <hop-limit>—Maximum allowed router hops.
 <include-all>—Groups, all of which must be present.
 <include-any>—Groups, one or more of which must be present.
 <no-exclude>—Disable exclude checking.
 <no-include-all>—Disable include-all checking.
 <no-include-any>—Disable include-any checking.

<fast-reroute> (configuration/logical-systems/protocols/rsvp)

Usage <configuration>
 <logical-systems>
 <protocols>
 <rsvp>
 <fast-reroute>
 <optimize-timer>seconds</optimize-timer>
 </fast-reroute>
 </rsvp>
 </protocols>
 </logical-systems>
 </configuration>

Description One-to-one fast-reroute protection mechanism.

Contents <optimize-timer>—Frequency of reoptimization for fast-reroute detour.

<fast-reroute> (configuration/protocols/mpls/label-switched-path)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <fast-reroute>
 <hop-limit>*hop-limit*</hop-limit>
 <bandwidth>*bandwidth*</bandwidth>
 <bandwidth-percent>*bandwidth-percent*</bandwidth-percent>
 <no-include-any/>
 <include-any>...</include-any>
 <no-include-all/>
 <include-all>...</include-all>
 <no-exclude/>
 <exclude>...</exclude>
 </fast-reroute>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Fast reroute.

Contents <bandwidth>—Bandwidth to reserve (bps).
 <bandwidth-percent>—Percentage of main path bandwidth to reserve.
 <exclude>—Groups, all of which must be absent.
 <hop-limit>—Maximum allowed router hops.
 <include-all>—Groups, all of which must be present.
 <include-any>—Groups, one or more of which must be present.
 <no-exclude>—Disable exclude checking.
 <no-include-all>—Disable include-all checking.
 <no-include-any>—Disable include-any checking.

<fast-reroute> (configuration/protocols/rsvp)

- Usage** `<configuration>`
 `<protocols>`
 `<rsvp>`
 <fast-reroute>
 `<optimize-timer>`*seconds*`</optimize-timer>`
 </fast-reroute>
 `</rsvp>`
 `</protocols>`
 `</configuration>`
- Description** One-to-one fast-reroute protection mechanism.
- Contents** `<optimize-timer>`—Frequency of reoptimization for fast-reroute detour.

<fast-update-filters> (configuration/services/pgcp/gateway)

- Usage** `<configuration>`
 `<services>`
 `<pgcp>`
 `<gateway>`
 <fast-update-filters>
 `<maximum-terms>`*maximum-terms*`</maximum-terms>`
 `<maximum-term-percentage>`*maximum-term-percentage*`</`
 `maximum-term-percentage>`
 </fast-update-filters>
 `</gateway>`
 `</pgcp>`
 `</services>`
 `</configuration>`
- Description** No documentation is available yet.
- Contents** `<maximum-term-percentage>`—Maximum percentage of gates with rate-limit terms at PFE.
- `<maximum-terms>`—Maximum gate rate-limit terms to install at PFE.

<fastether-options> (configuration/dynamic-profiles/interfaces/interface)

Usage

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <fastether-options>
          <loopback/>
          <flow-control/>
          <source-filtering/>
          <auto-negotiation/>
          <ingress-rate-limit>megabits per second</ingress-rate-limit>
          <source-address-filter>...</source-address-filter>
          <redundant-parent>...</redundant-parent>
          <ieee-802.3ad>...</ieee-802.3ad>
          <mpls>...</mpls>
          <ignore-l3-incompletes/>
        </fastether-options>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

Description Fast Ethernet interface-specific options.

Contents

- <auto-negotiation>—Enable auto-negotiation.
- <flow-control>—Enable flow control.
- <ieee-802.3ad>—IEEE 802.3ad.
- <ignore-l3-incompletes>—Ignore L3 incomplete errors.
- <ingress-rate-limit>—Ingress rate at port.
- <loopback>—Enable loopback.
- <mpls>—MPLS options.
- <redundant-parent>— Parent of this interface.
- <source-address-filter>—Source address filters.
- <source-filtering>—Enable source address filtering.

<fastether-options> (configuration/interfaces/interface)

Usage <configuration>
 <interfaces>
 <interface>
 <fastether-options>
 <loopback/>
 <flow-control/>
 <source-filtering/>
 <auto-negotiation/>
 <ingress-rate-limit>*megabits per second*</ingress-rate-limit>
 <source-address-filter>...</source-address-filter>
 <redundant-parent>...</redundant-parent>
 <ieee-802.3ad>...</ieee-802.3ad>
 <mpls>...</mpls>
 <ignore-l3-incompletes/>
 </fastether-options>
 </interface>
 </interfaces>
 </configuration>

Description Fast Ethernet interface-specific options.

Contents <auto-negotiation>—Enable auto-negotiation.

<flow-control>—Enable flow control.

<ieee-802.3ad>—IEEE 802.3ad.

<ignore-l3-incompletes>—Ignore L3 incomplete errors.

<ingress-rate-limit>—Ingress rate at port.

<loopback>—Enable loopback.

<mpls>—MPLS options.

<redundant-parent>— Parent of this interface.

<source-address-filter>—Source address filters.

<source-filtering>—Enable source address filtering.

<fate-sharing> (configuration/logical-systems/routing-instances/instance/routing-options)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <fate-sharing>
 <group>...</group>
 </fate-sharing>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Fate-sharing links or nodes database.

Contents <group>—Group of objects sharing common characteristics.

<fate-sharing> (configuration/logical-systems/routing-options)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <fate-sharing>
 <group>...</group>
 </fate-sharing>
 </routing-options>
 </logical-systems>
 </configuration>

Description Fate-sharing links or nodes database.

Contents <group>—Group of objects sharing common characteristics.

<fate-sharing> (configuration/routing-instances/instance/routing-options)

Usage	<pre> <configuration> <routing-instances> <instance> <routing-options> <fate-sharing> <group>...</group> </fate-sharing> </routing-options> </instance> </routing-instances> </configuration> </pre>
Description	Fate-sharing links or nodes database.
Contents	<group>—Group of objects sharing common characteristics.

<fate-sharing> (configuration/routing-options)

Usage	<pre> <configuration> <routing-options> <fate-sharing> <group>...</group> </fate-sharing> </routing-options> </configuration> </pre>
Description	Fate-sharing links or nodes database.
Contents	<group>—Group of objects sharing common characteristics.

<fault-management> (configuration/services/ggsn)

Usage	<pre> <configuration> <services> <ggsn> <fault-management> <alarm>...</alarm> </fault-management> </ggsn> </services> </configuration> </pre>
Description	Settings for fault management.
Contents	<alarm>—Settings for alarms.

<feb> (configuration/chassis/fpc-feb-connectivity/fpc)

Usage	<pre> <configuration> <chassis> <fpc-feb-connectivity> <fpc> <feb> <none/> <feb-slot>feb-slot</feb-slot> </feb> </fpc> </fpc-feb-connectivity> </chassis> </configuration> </pre>
Description	FEB slot number.
Contents	<p><feb-slot>—FEB slot number.</p> <p><none>—FPC not connected to any FEB.</p>

<feb> (configuration/chassis/redundancy)

Usage	<pre> <configuration> <chassis> <redundancy> <feb> <redundancy-group>...</redundancy-group> </feb> </redundancy> </chassis> </configuration> </pre>
Description	Forwarding Engine Board redundancy configuration.
Contents	<redundancy-group>—No documentation is available yet.

<feb> (configuration/chassis/redundancy/feb/redundancy-group)

Usage <configuration>
 <chassis>
 <redundancy>
 <feb>
 <redundancy-group>
 <feb>
 <name>*name*</name> <!-- identifier -->
 <primary/>
 <backup/>
 </feb>
 </redundancy-group>
 </feb>
 </redundancy>
 </chassis>
 </configuration>

Description Redundancy settings for a Forwarding Engine Board.

Contents <backup>—FEB is backup in the redundancy group.

 <name>—Slot number.

 <primary>—FEB is default master in the redundancy group.

<fec> (configuration/logical-systems/protocols/ldp/oam)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ldp>
 <oam>
 <fec>
 <name>*name*</name> <!-- identifier -->
 <bfd-liveness-detection>...</bfd-liveness-detection>
 <no-bfd-liveness-detection/>
 <periodic-traceroute>...</periodic-traceroute>
 </fec>
 </oam>
 </ldp>
 </protocols>
 </logical-systems>
 </configuration>

Description Forwarding equivalence class.

Contents <bfd-liveness-detection>—Bidirectional Forwarding Detection (BFD) options.

<name>—Forwarding equivalence class address.

<no-bfd-liveness-detection>—Disable BFD liveness detection.

<periodic-traceroute>—Configure periodic traceroute.

<fec> (configuration/logical-systems/protocols/ldp/policing)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ldp>
 <policing>
 <fec>
 <name>*name*</name> <!-- identifier -->
 <ingress-traffic>*ingress-traffic*</ingress-traffic>
 <transit-traffic>*transit-traffic*</transit-traffic>
 </fec>
 </policing>
 </ldp>
 </protocols>
 </logical-systems>
 </configuration>

Description Forwarding equivalence class.

Contents <ingress-traffic>—Name of filter to use for policing ingress LDP traffic.

 <name>—Forwarding equivalence class address.

 <transit-traffic>—Name of filter to use for policing transit LDP traffic.

<fec> (configuration/logical-systems/routing-instances/instance/protocols/ldp/oam)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <ldp>
            <oam>
              <fec>
                <name>name</name>    <!-- identifier -->
                <bfd-liveness-detection>...</bfd-liveness-detection>
                <no-bfd-liveness-detection/>
                <periodic-traceroute>...</periodic-traceroute>
              </fec>
            </oam>
          </ldp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Forwarding equivalence class.

Contents <bfd-liveness-detection>—Bidirectional Forwarding Detection (BFD) options.

<name>—Forwarding equivalence class address.

<no-bfd-liveness-detection>—Disable BFD liveness detection.

<periodic-traceroute>—Configure periodic traceroute.

<fec> (configuration/logical-systems/routing-instances/instance/protocols/ldp/policing)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <policing>
 <fec>
 <name>*name*</name> <!-- identifier -->
 <ingress-traffic>*ingress-traffic*</ingress-traffic>
 <transit-traffic>*transit-traffic*</transit-traffic>
 </fec>
 </policing>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Forwarding equivalence class.

Contents <ingress-traffic>—Name of filter to use for policing ingress LDP traffic.

 <name>—Forwarding equivalence class address.

 <transit-traffic>—Name of filter to use for policing transit LDP traffic.

<fec> (configuration/protocols/ldp/oam)

Usage <configuration>
 <protocols>
 <ldp>
 <oam>
 <fec>
 <name>name</name> <!-- identifier -->
 <bfd-liveness-detection>...</bfd-liveness-detection>
 <no-bfd-liveness-detection/>
 <periodic-traceroute>...</periodic-traceroute>
 </fec>
 </oam>
 </ldp>
 </protocols>
 </configuration>

Description Forwarding equivalence class.

Contents <bfd-liveness-detection>—Bidirectional Forwarding Detection (BFD) options.

<name>—Forwarding equivalence class address.

<no-bfd-liveness-detection>—Disable BFD liveness detection.

<periodic-traceroute>—Configure periodic traceroute.

<fec> (configuration/protocols/ldp/policing)

Usage <configuration>
 <protocols>
 <ldp>
 <policing>
 <fec>
 <name>name</name> <!-- identifier -->
 <ingress-traffic>ingress-traffic</ingress-traffic>
 <transit-traffic>transit-traffic</transit-traffic>
 </fec>
 </policing>
 </ldp>
 </protocols>
 </configuration>

Description Forwarding equivalence class.

Contents <ingress-traffic>—Name of filter to use for policing ingress LDP traffic.

<name>—Forwarding equivalence class address.

<transit-traffic>—Name of filter to use for policing transit LDP traffic.

<fec> (configuration/routing-instances/instance/protocols/ldp/oam)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <oam>
 <fec>
 <name>*name*</name> <!-- identifier -->
 <bfd-liveness-detection>...</bfd-liveness-detection>
 <no-bfd-liveness-detection/>
 <periodic-traceroute>...</periodic-traceroute>
 </fec>
 </oam>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Forwarding equivalence class.

Contents <bfd-liveness-detection>—Bidirectional Forwarding Detection (BFD) options.

<name>—Forwarding equivalence class address.

<no-bfd-liveness-detection>—Disable BFD liveness detection.

<periodic-traceroute>—Configure periodic traceroute.

<fec> (configuration/routing-instances/instance/protocols/ldp/policing)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <policing>
 <fec>
 <name>*name*</name> <!-- identifier -->
 <ingress-traffic>*ingress-traffic*</ingress-traffic>
 <transit-traffic>*transit-traffic*</transit-traffic>
 </fec>
 </policing>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Forwarding equivalence class.

Contents <ingress-traffic>—Name of filter to use for policing ingress LDP traffic.

 <name>—Forwarding equivalence class address.

 <transit-traffic>—Name of filter to use for policing transit LDP traffic.

<fields> (configuration/accounting-options/interface-profile)

Usage <configuration>
 <accounting-options>
 <interface-profile>
 <fields>
 <input-bytes/>
 <output-bytes/>
 <input-packets/>
 <output-packets/>
 <input-errors/>
 <output-errors/>
 <input-multicast/>
 <output-multicast/>
 <input-unicast/>
 <output-unicast/>
 <unsupported-protocol/>
 <rpf-check-bytes/>
 <rpf-check-packets/>
 <rpf-check6-bytes/>
 <rpf-check6-packets/>
 </fields>
 </interface-profile>
 </accounting-options>
 </configuration>

Description Statistics to log to file.

Contents <input-bytes>—Input bytes.

<input-errors>—Generic input error packets.

<input-multicast>—Input packets arriving by multicast.

<input-packets>—Input packets.

<input-unicast>—Input unicast packets.

<output-bytes>—Output bytes.

<output-errors>—Generic output error packets.

<output-multicast>—Output packets sent by multicast.

<output-packets>—Output packets.

<output-unicast>—Output unicast packets.

<rpf-check-bytes>—Bytes failing IPv4 reverse-path-forwarding check.

<rpf-check-packets>—Packets failing IPv4 reverse-path-forwarding check.

<rpf-check6-bytes>—Bytes failing IPv6 reverse-path-forwarding check.

<rpf-check6-packets>—Packets failing IPv6 reverse-path-forwarding check.

<unsupported-protocol>—Packets for unsupported protocol.

<fields> (configuration/accounting-options/routing-engine-profile)

Usage <configuration>
 <accounting-options>
 <routing-engine-profile>
 <fields>
 <host-name/>
 <date/>
 <time-of-day/>
 <uptime/>
 <cpu-load-1/>
 <cpu-load-5/>
 <cpu-load-15/>
 <memory-usage/>
 <total-cpu-usage/>
 </fields>
 </routing-engine-profile>
 </accounting-options>
 </configuration>

Description Information to log to file.

Contents <cpu-load-1>—Average system load over last 1 minute.
 <cpu-load-15>—Average system load over last 15 minutes.
 <cpu-load-5>—Average system load over last 5 minutes.
 <date>—Date.
 <host-name>—Hostname for this router.
 <memory-usage>—Instantaneous active memory usage.
 <time-of-day>—Time of day.
 <total-cpu-usage>—Total CPU usage percentage.
 <uptime>—Time since last reboot.

<file> (configuration/accounting-options)

Usage <configuration>
 <accounting-options>
 <file>
 <name>*name*</name> <!-- identifier -->
 <nonpersistent/>
 <size>*size*</size>
 <files>*files*</files>
 <transfer-interval>*minutes*</transfer-interval>
 <start-time>*start-time*</start-time>
 <archive-sites>...</archive-sites>
 </file>
 </accounting-options>
 </configuration>

Description Accounting data file configuration.

Contents <archive-sites>—List of archive destinations.

 <files>—Maximum number of files for this profile.

 <name>—Name of file in which to write accounting data.

 <nonpersistent>—File does not persist across reboot.

 <size>—Maximum accounting data file size.

 <start-time>—Start time for file transmission (yyyy-mm-dd.hh:mm).

 <transfer-interval>—Frequency at which to transfer files to archive sites.

<file> (configuration/bridge-domains/domain/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/bridge-domains/domain/multicast-snooping-options/traceoptions)

Usage <configuration>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/bridge-domains/domain/protocols/igmp-snooping/traceoptions)

Usage <configuration>
 <bridge-domains>
 <domain>
 <protocols>
 <igmp-snooping>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </igmp-snooping>
 </protocols>
 </domain>
 </bridge-domains>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/chassis/system-domains/traceoptions)

Usage <configuration>
 <chassis>
 <system-domains>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </system-domains>
 </chassis>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/class-of-service/traceoptions)

Usage <configuration>
 <class-of-service>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </class-of-service>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.
 <files>—Maximum number of trace files.
 <match>—Regular expression for lines to be logged.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

<file> (configuration/dynamic-profiles/class-of-service/traceoptions)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/dynamic-profiles/interfaces/traceoptions)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/dynamic-profiles/protocols/igmp/traceoptions)

Usage	<pre> <configuration> <dynamic-profiles> <protocols> <igmp> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </igmp> </protocols> </dynamic-profiles> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/event-options/event-script)

Usage	<pre> <configuration> <event-options> <event-script> <file> <name>name</name> <!-- identifier --> </file> </event-script> </event-options> </configuration> </pre>
Description	File name for event script.
Contents	<p><name>—Local filename of the script file.</p>

<file> (configuration/event-options/event-script/traceoptions)

Usage <configuration>
 <event-options>
 <event-script>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </event-script>
 </event-options>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/event-options/traceoptions)

Usage <configuration>
 <event-options>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </event-options>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/forwarding-options/helpers/traceoptions)

Usage <configuration>
 <forwarding-options>
 <helpers>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </helpers>
 </forwarding-options>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/forwarding-options/packet-capture)

Usage	<pre> <configuration> <forwarding-options> <packet-capture> <file> <filename>filename</filename> <!-- mandatory --> <files>files</files> <size>size</size> <world-readable/> </file> </packet-capture> </forwarding-options> </configuration> </pre>
Description	Parameters for file that contains captured packets.
Contents	<p><filename>—Name of file.</p> <p><files>—Maximum number of files.</p> <p><size>—Maximum file size.</p> <p><world-readable>—Allow any user to read packet-capture files.</p>

<file> (configuration/forwarding-options/port-mirroring/traceoptions)

Usage	<pre> <configuration> <forwarding-options> <port-mirroring> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </port-mirroring> </forwarding-options> </configuration> </pre>
Description	Trace file information.
Contents	<p><filename>—Filename to hold trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/forwarding-options/sampling/output)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <output>
 <file>
 <disable/>
 <filename>*filename*</filename> <!-- mandatory -->
 <files>*files*</files>
 <size>*size*</size>
 <world-readable/>
 <stamp/>
 </file>
 </output>
 </sampling>
 </forwarding-options>
 </configuration>

Description Configure parameters for dumping sampled packets.

Contents <disable>—Disable sampled packet dumps.

 <filename>—Name of file to contain sampled packet dumps.

 <files>—Maximum number of sampled packet dump files.

 <size>—Maximum sample dump file size.

 <stamp>—Timestamp every packet in the dump.

 <world-readable>—Allow any user to read the sampled dump.

<file> (configuration/forwarding-options/sampling/traceoptions)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </sampling>
 </forwarding-options>
 </configuration>

Description Trace file information.

Contents <filename>—Filename to hold trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/interfaces/traceoptions)

Usage <configuration>
 <interfaces>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </interfaces>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/jnx-example/traceoptions)

Usage <configuration>
 <jnx-example>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </jnx-example>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <logical-systems>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bfd/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bfd>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </bfd>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/family/inet/ labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <family>
          <inet>
            <labeled-unicast>
              <traffic-statistics>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traffic-statistics>
            </labeled-unicast>
          </inet>
        </family>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/family/inet6/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <family>
          <inet6>
            <labeled-unicast>
              <traffic-statistics>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traffic-statistics>
            </labeled-unicast>
          </inet6>
        </family>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/group/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <group>
          <family>
            <inet>
              <labeled-unicast>
                <traffic-statistics>
                  <file>
                    <filename>filename</filename>    <!-- mandatory -->
                    <size>size</size>
                    <files>files</files>
                    <world-readable/>
                  </file>
                </traffic-statistics>
              </labeled-unicast>
            </inet>
          </family>
        </group>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/group/family/inet6/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <group>
          <family>
            <inet6>
              <labeled-unicast>
                <traffic-statistics>
                  <file>
                    <filename>filename</filename>    <!-- mandatory -->
                    <size>size</size>
                    <files>files</files>
                    <world-readable/>
                  </file>
                </traffic-statistics>
              </labeled-unicast>
            </inet6>
          </family>
        </group>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/group/neighbor/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <group>
          <neighbor>
            <family>
              <inet>
                <labeled-unicast>
                  <traffic-statistics>
                    <file>
                      <filename>filename</filename>    <!-- mandatory -->
                      <size>size</size>
                      <files>files</files>
                      <world-readable/>
                    </file>
                  </traffic-statistics>
                </labeled-unicast>
              </inet>
            </family>
          </neighbor>
        </group>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <group>
          <neighbor>
            <family>
              <inet6>
                <labeled-unicast>
                  <traffic-statistics>
                    <file>
                      <filename>filename</filename>    <!-- mandatory -->
                      <size>size</size>
                      <files>files</files>
                      <world-readable/>
                    </file>
                  </traffic-statistics>
                </labeled-unicast>
              </inet6>
            </family>
          </neighbor>
        </group>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/group/neighbor/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</logical-systems>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/group/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/bgp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/dot1x/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <dot1x>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </dot1x>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/dvmrp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <dvmrp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </dvmrp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/esis/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <esis>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </esis>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/igmp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <igmp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </igmp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/igmp-host/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <igmp-host>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </igmp-host>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ilmi/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ilmi>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </ilmi>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/isis/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <isis>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </isis>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/l2circuit/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <l2circuit>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </l2circuit>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/l2iw/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <l2iw>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </l2iw>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/lacp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <lacp>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </lacp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/layer2-control/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <layer2-control>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </layer2-control>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ldp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ldp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ldp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ldp/traffic-statistics)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ldp>
 <traffic-statistics>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </ldp>
 </protocols>
 </logical-systems>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/link-management/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <link-management>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </link-management>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mld/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mld>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mld>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mld-host/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mld-host>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mld-host>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mpls/label-switched-path/oam/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <mpls>
        <label-switched-path>
          <oam>
            <traceoptions>
              <file>
                <filename>filename</filename>
                <size>size</size>
                <files>files</files>
                <world-readable/>
                <match>match</match>
              </file>
            </traceoptions>
          </oam>
        </label-switched-path>
      </mpls>
    </protocols>
  </logical-systems>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mpls/label-switched-path/primary/oam/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <oam>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </oam>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mpls/label-switched-path/secondary/oam/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <mpls>
        <label-switched-path>
          <secondary>
            <oam>
              <traceoptions>
                <file>
                  <filename>filename</filename>
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                  <match>match</match>
                </file>
              </traceoptions>
            </oam>
          </secondary>
        </label-switched-path>
      </mpls>
    </protocols>
  </logical-systems>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mpls/label-switched-path/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mpls/oam/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <mpls>
        <oam>
          <traceoptions>
            <file>
              <filename>filename</filename>
              <size>size</size>
              <files>files</files>
              <world-readable/>
              <match>match</match>
            </file>
          </traceoptions>
        </oam>
      </mpls>
    </protocols>
  </logical-systems>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mpls/statistics)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <statistics>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </statistics>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mpls/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
</logical-systems>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/msdp/group/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <msdp>
 <group>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </group>
 </msdp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/msdp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <msdp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </msdp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/mstp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mstp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mstp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/neighbor-discovery/secure/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <neighbor-discovery>
        <secure>
          <traceoptions>
            <file>
              <filename>filename</filename>
              <size>size</size>
              <files>files</files>
              <world-readable/>
              <match>match</match>
            </file>
          </traceoptions>
        </secure>
      </neighbor-discovery>
    </protocols>
  </logical-systems>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/oam/ethernet/connectivity-fault-management/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <oam>
 <ethernet>
 <connectivity-fault-management>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </connectivity-fault-management>
 </ethernet>
 </oam>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/oam/ethernet/link-fault-management/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <oam>
        <ethernet>
          <link-fault-management>
            <traceoptions>
              <file>
                <filename>filename</filename>
                <size>size</size>
                <files>files</files>
                <world-readable/>
                <match>match</match>
              </file>
            </traceoptions>
          </link-fault-management>
        </ethernet>
      </oam>
    </protocols>
  </logical-systems>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ospf/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ospf>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ospf3/realm/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ospf3>
 <realm>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </realm>
 </ospf3>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ospf3/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ospf3>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf3>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/pim/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <pim>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </pim>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ppp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ppp>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </ppp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/rip/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <rip>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rip>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ripng/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ripng>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ripng>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/ router-advertisement/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <router-advertisement>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </router-advertisement>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/router-discovery/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <router-discovery>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </router-discovery>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/rstp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <rstp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rstp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/rsvp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <rsvp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rsvp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/vrrp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <vrrp>
 <traceoptions>
 <file>
 <filename>filename</filename>
 <size>size</size>
 <files>files</files>
 <world-readable/>
 <match>match</match>
 <microsecond-stamp/>
 </file>
 </traceoptions>
 </vrrp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <microsecond-stamp>—Timestamp with microsecond granularity.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/protocols/vstp/vlan/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <vstp>
 <vlan>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </vlan>
 </vstp>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/forwarding-options/dhcp-relay/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <bridge-domains>
          <domain>
            <forwarding-options>
              <dhcp-relay>
                <traceoptions>
                  <file>
                    <filename>filename</filename>
                    <size>size</size>
                    <files>files</files>
                    <world-readable/>
                    <match>match</match>
                  </file>
                </traceoptions>
              </dhcp-relay>
            </forwarding-options>
          </domain>
        </bridge-domains>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/multicast-snooping-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </instance>
</routing-instances>
</logical-systems>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/protocols/igmp-snooping/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <bridge-domains>
          <domain>
            <protocols>
              <igmp-snooping>
                <traceoptions>
                  <file>
                    <filename>filename</filename>    <!-- mandatory -->
                    <size>size</size>
                    <files>files</files>
                    <world-readable/>
                  </file>
                </traceoptions>
              </igmp-snooping>
            </protocols>
          </domain>
        </bridge-domains>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/forwarding-options/helpers/traceoptions)

Usage

```
<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <forwarding-options>
          <helpers>
            <traceoptions>
              <file>
                <filename>filename</filename>
                <size>size</size>
                <files>files</files>
                <world-readable/>
                <match>match</match>
              </file>
            </traceoptions>
          </helpers>
        </forwarding-options>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>
```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/forwarding-options/packet-capture)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <packet-capture>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <files>*files*</files>
 <size>*size*</size>
 <world-readable/>
 </file>
 </packet-capture>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Parameters for file that contains captured packets.

Contents <filename>—Name of file.
 <files>—Maximum number of files.
 <size>—Maximum file size.
 <world-readable>—Allow any user to read packet-capture files.

<file> (configuration/logical-systems/routing-instances/instance/forwarding-options/port-mirroring/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <port-mirroring>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </port-mirroring>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Filename to hold trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/forwarding-options/sampling/output)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <sampling>
 <output>
 <file>
 <disable/>
 <filename>filename</filename> <!-- mandatory -->
 <files>files</files>
 <size>size</size>
 <world-readable/>
 <stamp/>
 </file>
 </output>
 </sampling>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Configure parameters for dumping sampled packets.

Contents <disable>—Disable sampled packet dumps.

 <filename>—Name of file to contain sampled packet dumps.

 <files>—Maximum number of sampled packet dump files.

 <size>—Maximum sample dump file size.

 <stamp>—Timestamp every packet in the dump.

 <world-readable>—Allow any user to read the sampled dump.

<file> (configuration/logical-systems/routing-instances/instance/forwarding-options/sampling/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <sampling>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </sampling>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Filename to hold trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/multicast-snooping-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <multicast-snooping-options>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast-snooping-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <family>
              <inet>
                <labeled-unicast>
                  <traffic-statistics>
                    <file>
                      <filename>filename</filename>    <!-- mandatory -->
                      <size>size</size>
                      <files>files</files>
                      <world-readable/>
                    </file>
                  </traffic-statistics>
                </labeled-unicast>
              </inet>
            </family>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/family/inet6/labeled-unicast/traffic-statistics)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <family>
                <inet>
                  <labeled-unicast>
                    <traffic-statistics>
                      <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <size>size</size>
                        <files>files</files>
                        <world-readable/>
                      </file>
                    </traffic-statistics>
                  </labeled-unicast>
                </inet>
              </family>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/family/inet6/labeled-unicast/traffic-statistics)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <neighbor>
                <family>
                  <inet>
                    <labeled-unicast>
                      <traffic-statistics>
                        <file>
                          <filename>filename</filename>    <!-- mandatory -->
                          <size>size</size>
                          <files>files</files>
                          <world-readable/>
                        </file>
                      </traffic-statistics>
                    </labeled-unicast>
                  </inet>
                </family>
              </neighbor>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/traffic-statistics)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <neighbor>
                <traceoptions>
                  <file>
                    <filename>filename</filename>    <!-- mandatory -->
                    <size>size</size>
                    <files>files</files>
                    <world-readable/>
                  </file>
                </traceoptions>
              </neighbor>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traceoptions>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/bgp/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <traceoptions>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traceoptions>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/esis/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <esis>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </esis>
 </protocols>
 </instance>
 </routing-instances>
</logical-systems>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/igmp-snooping/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <igmp-snooping>
            <traceoptions>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traceoptions>
          </igmp-snooping>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/isis/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/l2vpn/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
</logical-systems>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/ldp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/ldp/traffic-statistics)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <ldp>
            <traffic-statistics>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traffic-statistics>
          </ldp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/msdp/group/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <msdp>
            <group>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traceoptions>
            </group>
          </msdp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/msdp/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <msdp>
            <traceoptions>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traceoptions>
          </msdp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/mstp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <mstp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mstp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/mvpn/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <mvpn>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mvpn>
 </protocols>
 </instance>
</routing-instances>
</logical-systems>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/ospf/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/ospf3/realm/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <ospf3>
            <realm>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traceoptions>
            </realm>
          </ospf3>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/ospf3/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ospf3>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf3>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/pim/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <pim>
            <traceoptions>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traceoptions>
          </pim>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/rip/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/ripng/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ripng>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ripng>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/router-discovery/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <router-discovery>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </router-discovery>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/rstp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <rstp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rstp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/vpls/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <vpls>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </vpls>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/protocols/vstp/vlan/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <vstp>
            <vlan>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traceoptions>
            </vlan>
          </vstp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/routing-options/auto-export/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/routing-options/dynamic-tunnels/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <dynamic-tunnels>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </dynamic-tunnels>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/routing-options/flow/validation/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <flow>
 <validation>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </validation>
 </flow>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/routing-options/multicast/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <multicast>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/routing-options/resolution/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <resolution>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </resolution>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/routing-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-instances/instance/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

**<file> (configuration/logical-systems/routing-options/
auto-export/traceoptions)**

Usage <configuration>
 <logical-systems>
 <routing-options>
 <auto-export>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </auto-export>
 </routing-options>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-options/dynamic-tunnels/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <dynamic-tunnels>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </dynamic-tunnels>
 </routing-options>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-options/flow/validation/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <flow>
 <validation>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </validation>
 </flow>
 </routing-options>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-options/multicast/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <multicast>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast>
 </routing-options>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

**<file> (configuration/logical-systems/routing-options/
resolution/traceoptions)**

Usage <configuration>
 <logical-systems>
 <routing-options>
 <resolution>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </resolution>
 </routing-options>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/routing-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </routing-options>
 </logical-systems>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/logical-systems/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <logical-systems>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </logical-systems>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/multicast-snooping-options/traceoptions)

Usage <configuration>
 <multicast-snooping-options>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast-snooping-options>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.
 <files>—Maximum number of trace files.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bfd/traceoptions)

Usage <configuration>
 <protocols>
 <bfd>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </bfd>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/family/inet/labeled-unicast/traffic-statistics)

Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/family/inet6/ labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <family>
        <inet6>
          <labeled-unicast>
            <traffic-statistics>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traffic-statistics>
          </labeled-unicast>
        </inet6>
      </family>
    </bgp>
  </protocols>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/group/family/inet/ labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet>
            <labeled-unicast>
              <traffic-statistics>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traffic-statistics>
            </labeled-unicast>
          </inet>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/group/family/inet6/ labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet6>
            <labeled-unicast>
              <traffic-statistics>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traffic-statistics>
            </labeled-unicast>
          </inet6>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/group/neighbor/family/inet/ labeled-unicast/traffic-statistics)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/group/neighbor/family/inet6/ labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet6>
              <labeled-unicast>
                <traffic-statistics>
                  <file>
                    <filename>filename</filename>    <!-- mandatory -->
                    <size>size</size>
                    <files>files</files>
                    <world-readable/>
                  </file>
                </traffic-statistics>
              </labeled-unicast>
            </inet6>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/group/neighbor/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/group/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/traceoptions)

Usage	<pre> <configuration> <protocols> <bgp> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </bgp> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/dot1x/traceoptions)

Usage	<pre> <configuration> <protocols> <dot1x> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </dot1x> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/dvmrp/traceoptions)

Usage	<pre> <configuration> <protocols> <dvmrp> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </dvmrp> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/esis/traceoptions)

Usage	<pre> <configuration> <protocols> <esis> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </esis> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/igmp/traceoptions)

- Usage** `<configuration>
<protocols>
<igmp>
<traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
</traceoptions>
</igmp>
</protocols>
</configuration>`
- Description** Trace file options.
- Contents** `<filename>`—Name of file in which to write trace information.
- `<files>`—Maximum number of trace files.
- `<size>`—Maximum trace file size.
- `<world-readable>`—Allow any user to read the log file.

<file> (configuration/protocols/igmp-host/traceoptions)

- Usage** `<configuration>
<protocols>
<igmp-host>
<traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
</traceoptions>
</igmp-host>
</protocols>
</configuration>`
- Description** Trace file options.
- Contents** `<filename>`—Name of file in which to write trace information.
- `<files>`—Maximum number of trace files.
- `<size>`—Maximum trace file size.
- `<world-readable>`—Allow any user to read the log file.

<file> (configuration/protocols/ilmi/traceoptions)

Usage <configuration>
 <protocols>
 <ilmi>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </ilmi>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/isis/traceoptions)

Usage	<pre> <configuration> <protocols> <isis> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </isis> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/l2circuit/traceoptions)

Usage	<pre> <configuration> <protocols> <l2circuit> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </l2circuit> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/l2iw/traceoptions)

Usage <configuration>
 <protocols>
 <l2iw>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </l2iw>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/lacp/traceoptions)

Usage <configuration>
 <protocols>
 <lacp>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </lacp>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/layer2-control/traceoptions)

Usage	<pre> <configuration> <protocols> <layer2-control> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </layer2-control> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/ldp/traceoptions)

Usage	<pre> <configuration> <protocols> <ldp> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </ldp> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/ldp/traffic-statistics)

Usage	<pre> <configuration> <protocols> <ldp> <traffic-statistics> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traffic-statistics> </ldp> </protocols> </configuration> </pre>
Description	Statistics file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/link-management/traceoptions)

Usage	<pre> <configuration> <protocols> <link-management> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </link-management> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/mld/traceoptions)

Usage	<pre> <configuration> <protocols> <mld> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </mld> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/mld-host/traceoptions)

Usage	<pre> <configuration> <protocols> <mld-host> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </mld-host> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/mpls/label-switched-path/oam/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <oam>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </oam>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/mpls/label-switched-path/primary/oam/traceoptions)

Usage

```

<configuration>
  <protocols>
    <mpls>
      <label-switched-path>
        <primary>
          <oam>
            <traceoptions>
              <file>
                <filename>filename</filename>
                <size>size</size>
                <files>files</files>
                <world-readable/>
                <match>match</match>
              </file>
            </traceoptions>
          </oam>
        </primary>
      </label-switched-path>
    </mpls>
  </protocols>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/mpls/label-switched-path/secondary/oam/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <oam>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </oam>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/mpls/label-switched-path/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/mpls/oam/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <oam>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </oam>
 </mpls>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/mpls/statistics)

Usage	<pre> <configuration> <protocols> <mpls> <statistics> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </statistics> </mpls> </protocols> </configuration> </pre>
Description	Statistics file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/mpls/traceoptions)

Usage	<pre> <configuration> <protocols> <mpls> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </mpls> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/msdp/group/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </group>
 </msdp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/msdp/traceoptions)

Usage	<pre> <configuration> <protocols> <msdp> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </msdp> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/mstp/traceoptions)

Usage	<pre> <configuration> <protocols> <mstp> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </mstp> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/neighbor-discovery/secure/traceoptions)

Usage <configuration>
 <protocols>
 <neighbor-discovery>
 <secure>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </secure>
 </neighbor-discovery>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/oam/ethernet/connectivity-fault-management/traceoptions)

Usage

```

<configuration>
  <protocols>
    <oam>
      <ethernet>
        <connectivity-fault-management>
          <traceoptions>
            <file>
              <filename>filename</filename>
              <size>size</size>
              <files>files</files>
              <world-readable/>
              <match>match</match>
            </file>
          </traceoptions>
        </connectivity-fault-management>
      </ethernet>
    </oam>
  </protocols>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/oam/ethernet/link-fault-management/traceoptions)

Usage <configuration>
 <protocols>
 <oam>
 <ethernet>
 <link-fault-management>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </link-fault-management>
 </ethernet>
 </oam>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/ospf/traceoptions)

Usage <configuration>
 <protocols>
 <ospf>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/ospf3/realm/traceoptions)

Usage <configuration>
 <protocols>
 <ospf3>
 <realm>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </realm>
 </ospf3>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/ospf3/traceoptions)

Usage	<pre> <configuration> <protocols> <ospf3> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </ospf3> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/pim/traceoptions)

Usage	<pre> <configuration> <protocols> <pim> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </pim> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/ppp/traceoptions)

Usage <configuration>
 <protocols>
 <ppp>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </ppp>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/rip/traceoptions)

Usage	<pre> <configuration> <protocols> <rip> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </rip> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/ripng/traceoptions)

Usage	<pre> <configuration> <protocols> <ripng> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </ripng> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/router-advertisement/traceoptions)

Usage <configuration>
 <protocols>
 <router-advertisement>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </router-advertisement>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/router-discovery/traceoptions)

Usage	<pre> <configuration> <protocols> <router-discovery> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </router-discovery> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/rstp/traceoptions)

Usage	<pre> <configuration> <protocols> <rstp> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </rstp> </protocols> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/protocols/rsvp/traceoptions)

Usage <configuration>
 <protocols>
 <rsvp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rsvp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/vrrp/traceoptions)

Usage <configuration>
 <protocols>
 <vrrp>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 <microsecond-stamp/>
 </file>
 </traceoptions>
 </vrrp>
 </protocols>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<microsecond-stamp>—Timestamp with microsecond granularity.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/vstp/vlan/traceoptions)

Usage <configuration>
 <protocols>
 <vstp>
 <vlan>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </vlan>
 </vstp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/bridge-domains/domain/forwarding-options/dhcp-relay/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <bridge-domains>
        <domain>
          <forwarding-options>
            <dhcp-relay>
              <traceoptions>
                <file>
                  <filename>filename</filename>
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                  <match>match</match>
                </file>
              </traceoptions>
            </dhcp-relay>
          </forwarding-options>
        </domain>
      </bridge-domains>
    </instance>
  </routing-instances>
</configuration>

```

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/bridge-domains/ domain/multicast-snooping-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </instance>
</routing-instances>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/bridge-domains/ domain/protocols/igmp-snooping/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <bridge-domains>
        <domain>
          <protocols>
            <igmp-snooping>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traceoptions>
            </igmp-snooping>
          </protocols>
        </domain>
      </bridge-domains>
    </instance>
  </routing-instances>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/forwarding-options/helpers/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <helpers>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </helpers>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/forwarding-options/packet-capture)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <packet-capture>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <files>files</files>
 <size>size</size>
 <world-readable/>
 </file>
 </packet-capture>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Parameters for file that contains captured packets.

Contents <filename>—Name of file.
 <files>—Maximum number of files.
 <size>—Maximum file size.
 <world-readable>—Allow any user to read packet-capture files.

<file> (configuration/routing-instances/instance/forwarding-options/port-mirroring/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <port-mirroring>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </port-mirroring>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file information.

Contents <filename>—Filename to hold trace information.
 <files>—Maximum number of trace files.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/forwarding-options/sampling/output)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <sampling>
 <output>
 <file>
 <disable/>
 <filename>*filename*</filename> <!-- mandatory -->
 <files>*files*</files>
 <size>*size*</size>
 <world-readable/>
 <stamp/>
 </file>
 </output>
 </sampling>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Configure parameters for dumping sampled packets.

Contents <disable>—Disable sampled packet dumps.

 <filename>—Name of file to contain sampled packet dumps.

 <files>—Maximum number of sampled packet dump files.

 <size>—Maximum sample dump file size.

 <stamp>—Timestamp every packet in the dump.

 <world-readable>—Allow any user to read the sampled dump.

<file> (configuration/routing-instances/instance/forwarding-options/sampling/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <sampling>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </sampling>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file information.

Contents <filename>—Filename to hold trace information.
 <files>—Maximum number of trace files.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/multicast-snooping-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <multicast-snooping-options>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast-snooping-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet>
              <labeled-unicast>
                <traffic-statistics>
                  <file>
                    <filename>filename</filename>    <!-- mandatory -->
                    <size>size</size>
                    <files>files</files>
                    <world-readable/>
                  </file>
                </traffic-statistics>
              </labeled-unicast>
            </inet>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/family/inet6/labeled-unicast/traffic-statistics)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <inet>
                <labeled-unicast>
                  <traffic-statistics>
                    <file>
                      <filename>filename</filename>    <!-- mandatory -->
                      <size>size</size>
                      <files>files</files>
                      <world-readable/>
                    </file>
                  </traffic-statistics>
                </labeled-unicast>
              </inet>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/labeled-unicast/traffic-statistics)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/labeled-unicast/traffic-statistics)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet>
                  <labeled-unicast>
                    <traffic-statistics>
                      <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <size>size</size>
                        <files>files</files>
                        <world-readable/>
                      </file>
                    </traffic-statistics>
                  </labeled-unicast>
                </inet>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/traffic-statistics)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <labeled-unicast>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </labeled-unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <size>size</size>
                  <files>files</files>
                  <world-readable/>
                </file>
              </traceoptions>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/esis/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <esis>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </esis>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/igmp-snooping/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <igmp-snooping>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </igmp-snooping>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/isis/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/l2vpn/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ldp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ldp/traffic-statistics)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traffic-statistics>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traffic-statistics>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/msdp/group/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <msdp>
          <group>
            <traceoptions>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traceoptions>
          </group>
        </msdp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
 </instance>
</routing-instances>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/msdp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/mstp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <mstp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mstp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/mvpn/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <mvpn>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </mvpn>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ospf/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ospf3/realms/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf3>
          <realm>
            <traceoptions>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traceoptions>
          </realm>
        </ospf3>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ospf3/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf3>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf3>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/pim/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/rip/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ripng/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ripng>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </ripng>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/router-discovery/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <router-discovery>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </router-discovery>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/rstp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rstp>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </rstp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/vpls/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <vpls>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </vpls>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/vstp/vlan/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <vstp>
          <vlan>
            <traceoptions>
              <file>
                <filename>filename</filename>    <!-- mandatory -->
                <size>size</size>
                <files>files</files>
                <world-readable/>
              </file>
            </traceoptions>
          </vlan>
        </vstp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/ routing-options/auto-export/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/ routing-options/dynamic-tunnels/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <dynamic-tunnels>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </dynamic-tunnels>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/routing-options/flow/validation/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <flow>
 <validation>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </validation>
 </flow>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

**<file> (configuration/routing-instances/instance/
routing-options/multicast/traceoptions)**

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <multicast>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </multicast>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/routing-options/resolution/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <resolution>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </resolution>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/routing-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-options/auto-export/traceoptions)

Usage <configuration>
 <routing-options>
 <auto-export>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </auto-export>
 </routing-options>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-options/dynamic-tunnels/traceoptions)

Usage <configuration>
 <routing-options>
 <dynamic-tunnels>
 <traceoptions>
 <file>
 <filename>*filename*</filename> <!-- mandatory -->
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </dynamic-tunnels>
 </routing-options>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-options/flow/validation/traceoptions)

Usage <configuration>
 <routing-options>
 <flow>
 <validation>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </validation>
 </flow>
 </routing-options>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-options/multicast/traceoptions)

Usage	<pre> <configuration> <routing-options> <multicast> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </multicast> </routing-options> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/routing-options/resolution/traceoptions)

Usage	<pre> <configuration> <routing-options> <resolution> <traceoptions> <file> <filename>filename</filename> <!-- mandatory --> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </resolution> </routing-options> </configuration> </pre>
Description	Trace file options.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/routing-options/traceoptions)

Usage <configuration>
 <routing-options>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </routing-options>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file in which to write trace information.
 <files>—Maximum number of trace files.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

<file> (configuration/security/pki/traceoptions)

Usage <configuration>
 <security>
 <pki>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </pki>
 </security>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/security/traceoptions)

Usage <configuration>
 <security>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </security>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/services/adaptive-services-pics/traceoptions)

Usage <configuration>
 <services>
 <adaptive-services-pics>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </adaptive-services-pics>
 </services>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/services/dynamic-flow-capture/traceoptions)

Usage <configuration>
 <services>
 <dynamic-flow-capture>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dynamic-flow-capture>
 </services>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/services/ggsn/charging/charging-log/traceoptions)

Usage <configuration>
 <services>
 <ggsn>
 <charging>
 <charging-log>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </charging-log>
 </charging>
 </ggsn>
 </services>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/services/ipsec-vpn/traceoptions)

Usage <configuration>
 <services>
 <ipsec-vpn>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </ipsec-vpn>
 </services>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/services/logging/traceoptions)

Usage <configuration>
 <services>
 <logging>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </logging>
 </services>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/services/mobile-ip/traceoptions)

Usage <configuration>
 <services>
 <mobile-ip>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </mobile-ip>
 </services>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/services/pgcp/traceoptions)

Usage <configuration>
 <services>
 <pgcp>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 <microsecond-stamp/>
 </file>
 </traceoptions>
 </pgcp>
 </services>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <microsecond-stamp>—Timestamp with microsecond granularity.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/snmp/traceoptions)

Usage	<pre> <configuration> <snmp> <traceoptions> <file> <size>size</size> <files>files</files> <world-readable/> <match>match</match> </file> </traceoptions> </snmp> </configuration> </pre>
Description	Trace file information.
Contents	<p><files>—Maximum number of trace files.</p> <p><match>—Regular expression for lines to be logged.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/system/accounting/traceoptions)

Usage	<pre> <configuration> <system> <accounting> <traceoptions> <file> <filename>filename</filename> <size>size</size> <files>files</files> <world-readable/> </file> </traceoptions> </accounting> </system> </configuration> </pre>
Description	Trace file information.
Contents	<p><filename>—Name of file in which to write trace information.</p> <p><files>—Maximum number of trace files.</p> <p><size>—Maximum trace file size.</p> <p><world-readable>—Allow any user to read the log file.</p>

<file> (configuration/system/license/traceoptions)

Usage <configuration>
 <system>
 <license>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </license>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/system/processes/diameter-service/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <diameter-service>
 <traceoptions>
 <file>
 <filename>filename</filename>
 <size>size</size>
 <files>files</files>
 <world-readable/>
 <match>match</match>
 </file>
 </traceoptions>
 </diameter-service>
 </processes>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/processes/ general-authentication-service/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <general-authentication-service>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </general-authentication-service>
 </processes>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/processes/mac-validation/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <mac-validation>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </mac-validation>
 </processes>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/processes/process-monitor/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <process-monitor>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </process-monitor>
 </processes>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/processes/resource-cleanup/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <resource-cleanup>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </resource-cleanup>
 </processes>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/processes/ sbc-configuration-process/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <sbc-configuration-process>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </sbc-configuration-process>
 </processes>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/scripts/commit)

Usage <configuration>
 <system>
 <scripts>
 <commit>
 <file>
 <name>*name*</name> <!-- identifier -->
 <optional/>
 <source>*source*</source>
 <refresh/>
 <refresh-from>*refresh-from*</refresh-from>
 </file>
 </commit>
 </scripts>
 </system>
 </configuration>

Description Commit script file.

Contents <name>—Local filename of the script file.

<optional>—Allow commit to succeed if the script is missing.

<refresh>—Refresh this script from its source.

<refresh-from>—Refresh this script from a given URL.

<source>—URL of source for this script.

<file> (configuration/system/scripts/commit/traceoptions)

Usage <configuration>
 <system>
 <scripts>
 <commit>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </commit>
 </scripts>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/scripts/op)

Usage <configuration>
 <system>
 <scripts>
 <op>
 <file>
 <name>*name*</name> <!-- identifier -->
 <command>*command*</command>
 <description>*description*</description>
 <source>*source*</source>
 <refresh/>
 <refresh-from>*refresh-from*</refresh-from>
 <arguments>...</arguments>
 </file>
 </op>
 </scripts>
 </system>
 </configuration>

Description Configuration for each operation script.

Contents <arguments>—Command line argument to the script.

<command>—Command alias for the script file.

<description>—Description of the script.

<name>—Local filename of the script file.

<refresh>—Refresh this script from its source.

<refresh-from>—Refresh this script from a given URL.

<source>—URL of source for this script.

<file> (configuration/system/scripts/op/traceoptions)

Usage <configuration>
 <system>
 <scripts>
 <op>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 </file>
 </traceoptions>
 </op>
 </scripts>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/services/database-replication/traceoptions)

Usage <configuration>
 <system>
 <services>
 <database-replication>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </database-replication>
 </services>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/services/dhcp/traceoptions)

Usage <configuration>
 <system>
 <services>
 <dhcp>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp>
 </services>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

<files>—Maximum number of trace files.

<match>—Regular expression for lines to be logged.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/services/outbound-ssh/traceoptions)

Usage <configuration>
 <system>
 <services>
 <outbound-ssh>
 <traceoptions>
 <file>
 <filename>*filename*</filename>
 <size>*size*</size>
 <files>*files*</files>
 <world-readable/>
 <match>*match*</match>
 </file>
 </traceoptions>
 </outbound-ssh>
 </services>
 </system>
 </configuration>

Description Trace file information.

Contents <filename>—Name of file in which to write trace information.

 <files>—Maximum number of trace files.

 <match>—Regular expression for lines to be logged.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/system/syslog)

Usage <configuration>
 <system>
 <syslog>
 <file>
 <name>*name*</name> <!-- identifier -->
 <contents>...</contents>
 <match>*match*</match>
 <archive>...</archive>
 <explicit-priority/>
 <structured-data>...</structured-data>
 </file>
 </syslog>
 </system>
 </configuration>

Description File in which to log data.

Contents <archive>—Archive file information.

<contents>—No documentation is available yet.

<explicit-priority>—Include priority and facility in messages.

<match>—Regular expression for lines to be logged.

<name>—Name of file in which to log data.

<structured-data>—Log system message in structured format.

<file-specification> (configuration/services/flow-collector)

Usage <configuration>
 <services>
 <flow-collector>
 <file-specification>
 <name>*name*</name> <!-- identifier -->
 <name-format>*name-format*</name-format> <!-- mandatory -->
 <data-format>*data-format-choice*</data-format>
 <transfer>...</transfer>
 </file-specification>
 </flow-collector>
 </services>
 </configuration>

Description File format specification.

Contents <data-format>—Data format for flow collection output.

■ flow-compressed—Flow format (compressed).

<name>—Name for file type.

<name-format>—Format string for filename (allows {text} macros).

<transfer>—No documentation is available yet.

<filename> (configuration/services/ggsn/service-identification/ftp-rule/term/from/ftp)

Usage

```

<configuration>
  <services>
    <ggsn>
      <service-identification>
        <ftp-rule>
          <term>
            <from>
              <ftp>
                <filename>
                <case/>
                <contains>...</contains>
                <not-contains>...</not-contains>
                </filename>
              </ftp>
            </from>
          </term>
        </ftp-rule>
      </service-identification>
    </ggsn>
  </services>
</configuration>

```

Description Match filename.

Contents

- <case>—Consider case while processing.
- <contains>—Matches a substring.
- <not-contains>—Doesn't match a substring.

<filename> (configuration/services/ggsn/service-identification/tftp-rule/term/from/tftp)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <tftp-rule>
 <term>
 <from>
 <tftp>
 <filename>
 <case/>
 <is>is</is>
 <not-is>...</not-is>
 <starts-with>starts-with</starts-with>
 <not-starts-with>...</not-starts-with>
 <ends-with>ends-with</ends-with>
 <not-ends-with>...</not-ends-with>
 <contains>...</contains>
 <not-contains>...</not-contains>
 </filename>
 </tftp>
 </from>
 </term>
 </tftp-rule>
 </service-identification>
 </ggsn>
 </services>
</configuration>

Description Match filename.

Contents <case>—Consider case while processing.

<contains>—Matches a substring.

<ends-with>—End matches.

<is>—Exact match.

<not-contains>—Doesn't match a substring.

<not-ends-with>—End doesn't match.

<not-is>—Exclude exact match.

<not-starts-with>—Beginning doesn't match.

<starts-with>—Beginning matches.

<fill-level> (configuration/class-of-service/drop-profiles)

Usage	<pre> <configuration> <class-of-service> <drop-profiles> <fill-level> <name>name</name> <!-- identifier --> <drop-probability>drop-probability</drop-probability> </fill-level> </drop-profiles> </class-of-service> </configuration> </pre>
Description	Fill-level value of data point.
Contents	<p><drop-probability>—Probability packet will be dropped.</p> <p><name>—Percentage the queue is full.</p>

<fill-level> (configuration/class-of-service/drop-profiles/interpolate)

Usage	<pre> <configuration> <class-of-service> <drop-profiles> <interpolate> <fill-level> <name>name</name> <!-- identifier --> </fill-level> </interpolate> </drop-profiles> </class-of-service> </configuration> </pre>
Description	Data points for queue full percentage.
Contents	<name>—Data points for queue full percentage.

<fill-level> (configuration/dynamic-profiles/class-of-service/drop-profiles)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <drop-profiles> <fill-level> <name>name</name> <!-- identifier --> <drop-probability>drop-probability</drop-probability> </fill-level> </drop-profiles> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Fill-level value of data point.
Contents	<p><drop-probability>—Probability packet will be dropped.</p> <p><name>—Percentage the queue is full.</p>

<fill-level> (configuration/dynamic-profiles/class-of-service/drop-profiles/interpolate)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <drop-profiles> <interpolate> <fill-level> <name>name</name> <!-- identifier --> </fill-level> </interpolate> </drop-profiles> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Data points for queue full percentage.
Contents	<name>—Data points for queue full percentage.

<filter> (configuration/bridge-domains/domain/forwarding-options)

Usage <configuration>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <filter>
 <input>*input*</input>
 </filter>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </configuration>

Description Filtering for bridge forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.

<filter> (configuration/dynamic-profiles/interfaces/interface/unit)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <interface>
 <unit>
 <filter>
 <output>*output*</output>
 </filter>
 </unit>
 </interface>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Filters to apply to all families configured under this logical interface.

Contents <output>—Name of filter applied to transmitted packets.

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/any)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <interface>
 <unit>
 <family>
 <any>
 <filter>
 <input>*input*</input>
 <group>*group*</group>
 </filter>
 </any>
 </family>
 </unit>
 </interface>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Layer 2 packet filtering.

Contents <group>—Group to which interface belongs.

 <input>—Name of filter applied to received packets.

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/bridge)

Usage

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <bridge>
              <filter>
                <input>...</input>
                <input-list>...</input-list>
                <output>...</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </bridge>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

Description Packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Filter to be applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Filter to be applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/ccc)

Usage

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <ccc>
              <filter>
                <input>input</input>
                <input-list>...</input-list>
                <output>output</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </ccc>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

Description Packet filtering.

Contents

- <group>—Interface group to which interface belongs.
- <input>—Name of filter applied to received packets.
- <input-list>—List of filter modules applied to received packets .
- <output>—Name of filter applied to transmitted packets.
- <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/ethernet-switching)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <interface>
 <unit>
 <family>
 <ethernet-switching>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </ethernet-switching>
 </family>
 </unit>
 </interface>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Packet filtering.

Contents <input>—Name of filter applied to received packets.

 <output>—Name of filter applied to transmitted packets.

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet)

Usage

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>
              <filter>
                <input>...</input>
                <input-list>...</input-list>
                <output>...</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

Description Packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Filter to be applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Filter to be applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet6)

Usage

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <filter>
                <input>...</input>
                <input-list>...</input-list>
                <output>...</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

Description Packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Filter to be applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Filter to be applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/mpls)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <interface>
 <unit>
 <family>
 <mpls>
 <filter>
 <input>*input*</input>
 <input-list>...</input-list>
 <output>*output*</output>
 <output-list>...</output-list>
 <group>*group*</group>
 </filter>
 </mpls>
 </family>
 </unit>
 </interface>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Packet filtering.

Contents <group>—Interface group to which interface belongs.

 <input>—Name of filter applied to received packets.

 <input-list>—List of filter modules applied to received packets .

 <output>—Name of filter applied to transmitted packets.

 <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/dynamic-profiles/interfaces/interface/unit/family/vpls)

Usage

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <vpls>
              <filter>
                <input>...</input>
                <input-list>...</input-list>
                <output>...</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </vpls>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

Description Packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Filter to be applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Filter to be applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/firewall)

- Usage** `<configuration>`
 `<firewall>`
 <filter>
 `<name>name</name>` <!-- identifier -->
 `<accounting-profile>...</accounting-profile>`
 `<interface-specific/>`
 `<term>...</term>`
 </filter>
 `</firewall>`
 `</configuration>`
- Description** Define an IPv4 firewall filter.
- Contents** `<accounting-profile>`—Accounting profile name.
- `<interface-specific>`—Defined counters are interface specific.
- `<name>`—Filter name.
- `<term>`—Define a firewall term.

<filter> (configuration/firewall/family/any)

- Usage** `<configuration>`
 `<firewall>`
 `<family>`
 `<any>`
 <filter>
 `<name>name</name>` <!-- identifier -->
 `<term>...</term>`
 </filter>
 `</any>`
 `</family>`
 `</firewall>`
 `</configuration>`
- Description** Define a protocol-independent filter.
- Contents** `<name>`—Filter name.
- `<term>`—Define a firewall term.

<filter> (configuration/firewall/family/bridge)

Usage <configuration>
 <firewall>
 <family>
 <bridge>
 <filter>
 <name>name</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </bridge>
 </family>
 </firewall>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Defined counters are interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/firewall/family/cc)

Usage <configuration>
 <firewall>
 <family>
 <ccc>
 <filter>
 <name>name</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </ccc>
 </family>
 </firewall>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Any counters defined will be interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/firewall/family/ethernet-switching)

Usage <configuration>
 <firewall>
 <family>
 <ethernet-switching>
 <filter>
 <name>name</name> <!-- identifier -->
 <term>...</term>
 </filter>
 </ethernet-switching>
 </family>
 </firewall>
 </configuration>

Description Define an Ethernet Switching firewall filter.

Contents <name>—Filter name.
 <term>—Define a firewall term.

<filter> (configuration/firewall/family/inet)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <name>name</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

Description Define an IPv4 firewall filter.

Contents <accounting-profile>—Accounting profile name.
 <interface-specific>—Defined counters are interface specific.
 <name>—Filter name.
 <term>—Define a firewall term.

<filter> (configuration/firewall/family/inet6)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <name>name</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>

Description Define an IPv6 firewall filter.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Defined counters are interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/firewall/family/mpls)

Usage <configuration>
 <firewall>
 <family>
 <mpls>
 <filter>
 <name>name</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </mpls>
 </family>
 </firewall>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Defined counters are interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/firewall/family/vpls)

Usage <configuration>
 <firewall>
 <family>
 <vpls>
 <filter>
 <name>*name*</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </vpls>
 </family>
 </firewall>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.
 <interface-specific>—Defined counters are interface specific.
 <name>—Filter name.
 <term>—Define a firewall term.

<filter> (configuration/forwarding-options/family/inet)

Usage <configuration>
 <forwarding-options>
 <family>
 <inet>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </inet>
 </family>
 </forwarding-options>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.
 <output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/forwarding-options/family/inet6)

Usage <configuration>
 <forwarding-options>
 <family>
 <inet6>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </inet6>
 </family>
 </forwarding-options>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.
 <output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/forwarding-options/family/mpls)

Usage <configuration>
 <forwarding-options>
 <family>
 <mpls>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </mpls>
 </family>
 </forwarding-options>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.
 <output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/forwarding-options/family/vpls)

Usage <configuration>
 <forwarding-options>
 <family>
 <vpls>
 <filter>
 <input>*input*</input>
 </filter>
 </vpls>
 </family>
 </forwarding-options>
 </configuration>

Description Filtering for VPLS DMAC forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.

<filter> (configuration/interfaces/interface/unit)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <filter>
 <output>*output*</output>
 </filter>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Filters to apply to all families configured under this logical interface.

Contents <output>—Name of filter applied to transmitted packets.

<filter> (configuration/interfaces/interface/unit/family/any)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <any>
 <filter>
 <input>*input*</input>
 <group>*group*</group>
 </filter>
 </any>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Layer 2 packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Name of filter applied to received packets.

<filter> (configuration/interfaces/interface/unit/family/bridge)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <bridge>
 <filter>
 <input>...</input>
 <input-list>...</input-list>
 <output>...</output>
 <output-list>...</output-list>
 <group>group</group>
 </filter>
 </bridge>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Packet filtering.

Contents <group>—Group to which interface belongs.

 <input>—Filter to be applied to received packets.

 <input-list>—List of filter modules applied to received packets .

 <output>—Filter to be applied to transmitted packets.

 <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/interfaces/interface/unit/family/ccc)

Usage

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <ccc>
            <filter>
              <input>input</input>
              <input-list>...</input-list>
              <output>output</output>
              <output-list>...</output-list>
              <group>group</group>
            </filter>
          </ccc>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>

```

Description Packet filtering.

Contents

- <group>—Interface group to which interface belongs.
- <input>—Name of filter applied to received packets.
- <input-list>—List of filter modules applied to received packets .
- <output>—Name of filter applied to transmitted packets.
- <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/interfaces/interface/unit/family/ethernet-switching)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <ethernet-switching>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </ethernet-switching>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Packet filtering.

Contents <input>—Name of filter applied to received packets.

 <output>—Name of filter applied to transmitted packets.

<filter> (configuration/interfaces/interface/unit/family/inet)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>
 <filter>
 <input>...</input>
 <input-list>...</input-list>
 <output>...</output>
 <output-list>...</output-list>
 <group>group</group>
 </filter>
 </inet>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Packet filtering.

Contents <group>—Group to which interface belongs.

 <input>—Filter to be applied to received packets.

 <input-list>—List of filter modules applied to received packets .

 <output>—Filter to be applied to transmitted packets.

 <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/interfaces/interface/unit/family/inet6)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet6>
 <filter>
 <input>...</input>
 <input-list>...</input-list>
 <output>...</output>
 <output-list>...</output-list>
 <group>group</group>
 </filter>
 </inet6>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Packet filtering.

Contents <group>—Group to which interface belongs.

 <input>—Filter to be applied to received packets.

 <input-list>—List of filter modules applied to received packets .

 <output>—Filter to be applied to transmitted packets.

 <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/interfaces/interface/unit/family/mpls)

Usage

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <mpls>
            <filter>
              <input>input</input>
              <input-list>...</input-list>
              <output>output</output>
              <output-list>...</output-list>
              <group>group</group>
            </filter>
          </mpls>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>

```

Description Packet filtering.

Contents

- <group>—Interface group to which interface belongs.
- <input>—Name of filter applied to received packets.
- <input-list>—List of filter modules applied to received packets .
- <output>—Name of filter applied to transmitted packets.
- <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/interfaces/interface/unit/family/vpls)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <vpls>
 <filter>
 <input>...</input>
 <input-list>...</input-list>
 <output>...</output>
 <output-list>...</output-list>
 <group>group</group>
 </filter>
 </vpls>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Packet filtering.

Contents <group>—Group to which interface belongs.

 <input>—Filter to be applied to received packets.

 <input-list>—List of filter modules applied to received packets .

 <output>—Filter to be applied to transmitted packets.

 <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/logical-systems/firewall)

Usage	<pre> <configuration> <logical-systems> <firewall> <filter> <name>name</name> <!-- identifier --> <accounting-profile>...</accounting-profile> <interface-specific/> <term>...</term> </filter> </firewall> </logical-systems> </configuration> </pre>
Description	Define an IPv4 firewall filter.
Contents	<p><accounting-profile>—Accounting profile name.</p> <p><interface-specific>—Defined counters are interface specific.</p> <p><name>—Filter name.</p> <p><term>—Define a firewall term.</p>

<filter> (configuration/logical-systems/firewall/family/any)

Usage	<pre> <configuration> <logical-systems> <firewall> <family> <any> <filter> <name>name</name> <!-- identifier --> <term>...</term> </filter> </any> </family> </firewall> </logical-systems> </configuration> </pre>
Description	Define a protocol-independent filter.
Contents	<p><name>—Filter name.</p> <p><term>—Define a firewall term.</p>

<filter> (configuration/logical-systems/firewall/family/bridge)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <bridge>
 <filter>
 <name>*name*</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </bridge>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.
 <interface-specific>—Defined counters are interface specific.
 <name>—Filter name.
 <term>—Define a firewall term.

<filter> (configuration/logical-systems/firewall/family/ccc)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <ccc>
 <filter>
 <name>name</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </ccc>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Any counters defined will be interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/logical-systems/firewall/family/ethernet-switching)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <ethernet-switching>
 <filter>
 <name>name</name> <!-- identifier -->
 <term>...</term>
 </filter>
 </ethernet-switching>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Define an Ethernet Switching firewall filter.

Contents <name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/logical-systems/firewall/family/inet)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <filter>
 <name>*name*</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </inet>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Define an IPv4 firewall filter.

Contents <accounting-profile>—Accounting profile name.

 <interface-specific>—Defined counters are interface specific.

 <name>—Filter name.

 <term>—Define a firewall term.

<filter> (configuration/logical-systems/firewall/family/inet6)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet6>
 <filter>
 <name>*name*</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Define an IPv6 firewall filter.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Defined counters are interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/logical-systems/firewall/family/mps)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <mps>
 <filter>
 <name>*name*</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </mps>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Defined counters are interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/logical-systems/firewall/family/vpls)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <vpls>
 <filter>
 <name>*name*</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <term>...</term>
 </filter>
 </vpls>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Defined counters are interface specific.

<name>—Filter name.

<term>—Define a firewall term.

<filter> (configuration/logical-systems/interfaces/interface/unit)

Usage <configuration>
 <logical-systems>
 <interfaces>
 <interface>
 <unit>
 <filter>
 <output>*output*</output>
 </filter>
 </unit>
 </interface>
 </interfaces>
 </logical-systems>
 </configuration>

Description Filters to apply to all families configured under this logical interface.

Contents <output>—Name of filter applied to transmitted packets.

<filter> (configuration/logical-systems/interfaces/interface/unit/family/any)

Usage <configuration>
 <logical-systems>
 <interfaces>
 <interface>
 <unit>
 <family>
 <any>
 <filter>
 <input>*input*</input>
 <group>*group*</group>
 </filter>
 </any>
 </family>
 </unit>
 </interface>
 </interfaces>
 </logical-systems>
 </configuration>

Description Layer 2 packet filtering.

Contents <group>—Group to which interface belongs.

 <input>—Name of filter applied to received packets.

<filter> (configuration/logical-systems/interfaces/interface/unit/family/bridge)

Usage

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <bridge>
              <filter>
                <input>...</input>
                <input-list>...</input-list>
                <output>...</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </bridge>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

Description Packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Filter to be applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Filter to be applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/logical-systems/interfaces/interface/unit/family/ccc)

Usage

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <ccc>
              <filter>
                <input>input</input>
                <input-list>...</input-list>
                <output>output</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </ccc>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

Description Packet filtering.

Contents <group>—Interface group to which interface belongs.

<input>—Name of filter applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Name of filter applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/logical-systems/interfaces/interface/unit/family/ethernet-switching)

Usage <configuration>
 <logical-systems>
 <interfaces>
 <interface>
 <unit>
 <family>
 <ethernet-switching>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </ethernet-switching>
 </family>
 </unit>
 </interface>
 </interfaces>
 </logical-systems>
 </configuration>

Description Packet filtering.

Contents <input>—Name of filter applied to received packets.

 <output>—Name of filter applied to transmitted packets.

<filter> (configuration/logical-systems/interfaces/interface/unit/family/inet)

Usage <configuration>
 <logical-systems>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>
 <filter>
 <input>...</input>
 <input-list>...</input-list>
 <output>...</output>
 <output-list>...</output-list>
 <group>group</group>
 </filter>
 </inet>
 </family>
 </unit>
 </interface>
 </interfaces>
 </logical-systems>
 </configuration>

Description Packet filtering.

Contents <group>—Group to which interface belongs.

 <input>—Filter to be applied to received packets.

 <input-list>—List of filter modules applied to received packets .

 <output>—Filter to be applied to transmitted packets.

 <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/logical-systems/interfaces/interface/unit/family/inet6)

Usage

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <filter>
                <input>...</input>
                <input-list>...</input-list>
                <output>...</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

Description Packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Filter to be applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Filter to be applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/logical-systems/interfaces/interface/unit/family/mpls)

Usage <configuration>
 <logical-systems>
 <interfaces>
 <interface>
 <unit>
 <family>
 <mpls>
 <filter>
 <input>*input*</input>
 <input-list>...</input-list>
 <output>*output*</output>
 <output-list>...</output-list>
 <group>*group*</group>
 </filter>
 </mpls>
 </family>
 </unit>
 </interface>
 </interfaces>
 </logical-systems>
 </configuration>

Description Packet filtering.

Contents <group>—Interface group to which interface belongs.

 <input>—Name of filter applied to received packets.

 <input-list>—List of filter modules applied to received packets .

 <output>—Name of filter applied to transmitted packets.

 <output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/logical-systems/interfaces/interface/unit/family/vpls)

Usage

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <vpls>
              <filter>
                <input>...</input>
                <input-list>...</input-list>
                <output>...</output>
                <output-list>...</output-list>
                <group>group</group>
              </filter>
            </vpls>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

Description Packet filtering.

Contents <group>—Group to which interface belongs.

<input>—Filter to be applied to received packets.

<input-list>—List of filter modules applied to received packets .

<output>—Filter to be applied to transmitted packets.

<output-list>—List of filter modules applied to transmitted packets .

<filter> (configuration/logical-systems/protocols/bgp/group/neighbor/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/logical-systems/protocols/bgp/group/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
</configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

 ■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/logical-systems/protocols/bgp/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/logical-systems/protocols/ldp/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </logical-systems>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ **fec**—Filter based on FEC associated to the traced object.

 <policy>—Filter policy.

<filter> (configuration/logical-systems/protocols/pim/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </pim>
 </protocols>
 </logical-systems>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/logical-systems/protocols/rip/traceoptions/flag)

Usage	<pre> <configuration> <logical-systems> <protocols> <rip> <traceoptions> <flag> <filter> <match-on>match-on-choice</match-on> <!-- mandatory --> <policy>...</policy> <!-- mandatory --> </filter> </flag> </traceoptions> </rip> </protocols> </logical-systems> </configuration> </pre>
Description	Filter to apply to this flag.
Contents	<p><match-on>—Argument on which to match.</p> <ul style="list-style-type: none"> ■ prefix—Filter based on prefix. <p><policy>—Filter policy.</p>

<filter> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/forwarding-options)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <bridge-domains> <domain> <forwarding-options> <filter> <input>input</input> </filter> </forwarding-options> </domain> </bridge-domains> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	Filtering for bridge forwarding table.
Contents	<input>—Name of input filter to apply for forwarded packets.

<filter> (configuration/logical-systems/routing-instances/instance/forwarding-options/family/inet)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <inet>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </inet>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.
 <output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/logical-systems/routing-instances/instance/forwarding-options/family/inet6)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <inet6>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </inet6>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.
 <output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/logical-systems/routing-instances/instance/forwarding-options/family/mpls)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <mpls>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </mpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.

<output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/logical-systems/routing-instances/instance/forwarding-options/family/vpls)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <vpls>
 <filter>
 <input>*input*</input>
 </filter>
 </vpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Filtering for VPLS DMAC forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.

<filter> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions/flag)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <neighbor>
                <traceoptions>
                  <flag>
                    <filter>
                      <match-on>match-on-choice</match-on>    <!-- mandatory -->
                      <policy>...</policy>    <!-- mandatory -->
                    </filter>
                  </flag>
                </traceoptions>
              </neighbor>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/logical-systems/routing-instances/instance/protocols/bgp/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </instance>
</routing-instances>
</logical-systems>
</configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/logical-systems/routing-instances/instance/protocols/ldp/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </instance>
</routing-instances>
</logical-systems>
</configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- fec—Filter based on FEC associated to the traced object.

 <policy>—Filter policy.

<filter> (configuration/logical-systems/routing-instances/instance/protocols/pim/traceoptions/flag)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <pim>
            <traceoptions>
              <flag>
                <filter>
                  <match-on>match-on-choice</match-on>    <!-- mandatory -->
                  <policy>...</policy>    <!-- mandatory -->
                </filter>
              </flag>
            </traceoptions>
          </pim>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/logical-systems/routing-instances/instance/protocols/rip/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
</routing-instances>
</logical-systems>
</configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/logical-systems/routing-instances/instance/routing-options/flow/validation/traceoptions/flag)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <routing-options>
          <flow>
            <validation>
              <traceoptions>
                <flag>
                  <filter>
                    <match-on>match-on-choice</match-on>    <!-- mandatory -->
                    <policy>...</policy>    <!-- mandatory -->
                  </filter>
                </flag>
              </traceoptions>
            </validation>
          </flow>
        </routing-options>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Filter to apply to tracing.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.
- route-attribute—Filter based on route attributes.

<policy>—Filter policy.

<filter> (configuration/logical-systems/routing-options/flow/validation/traceoptions/flag)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <flow>
 <validation>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </validation>
 </flow>
 </routing-options>
 </logical-systems>
 </configuration>

Description Filter to apply to tracing.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.
- route-attribute—Filter based on route attributes.

<policy>—Filter policy.

<filter> (configuration/protocols/bgp/group/neighbor/traceoptions/flag)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

 ■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/protocols/bgp/group/traceoptions/flag)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/protocols/bgp/traceoptions/flag)

Usage <configuration>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/protocols/ldp/traceoptions/flag)

Usage <configuration>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- *fec*—Filter based on FEC associated to the traced object.

<policy>—Filter policy.

<filter> (configuration/protocols/pim/traceoptions/flag)

Usage <configuration>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </pim>
 </protocols>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- *prefix*—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/protocols/rip/traceoptions/flag)

- Usage** <configuration>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </configuration>
- Description** Filter to apply to this flag.
- Contents** <match-on>—Argument on which to match.
- prefix—Filter based on prefix.
- <policy>—Filter policy.

<filter> (configuration/routing-instances/instance/bridge-domains/domain/forwarding-options)

- Usage** <configuration>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <filter>
 <input>*input*</input>
 </filter>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </configuration>
- Description** Filtering for bridge forwarding table.
- Contents** <input>—Name of input filter to apply for forwarded packets.

<filter> (configuration/routing-instances/instance/forwarding-options/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <inet>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </inet>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.
 <output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/routing-instances/instance/forwarding-options/family/inet6)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <inet6>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </inet6>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.
 <output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/routing-instances/instance/forwarding-options/family/mpls)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <mpls>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 </filter>
 </mpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Filtering for forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.

<output>—Name of output filter to apply for forwarded packets.

<filter> (configuration/routing-instances/instance/forwarding-options/family/vpls)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <vpls>
 <filter>
 <input>*input*</input>
 </filter>
 </vpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Filtering for VPLS DMAC forwarding table.

Contents <input>—Name of input filter to apply for forwarded packets.

<filter> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions/flag)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <traceoptions>
                <flag>
                  <filter>
                    <match-on>match-on-choice</match-on>    <!-- mandatory -->
                    <policy>...</policy>    <!-- mandatory -->
                  </filter>
                </flag>
              </traceoptions>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions/flag)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
</instance>
</routing-instances>
</configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/routing-instances/instance/protocols/bgp/traceoptions/flag)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <traceoptions>
            <flag>
              <filter>
                <match-on>match-on-choice</match-on>    <!-- mandatory -->
                <policy>...</policy>    <!-- mandatory -->
              </filter>
            </flag>
          </traceoptions>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/routing-instances/instance/protocols/ldp/traceoptions/flag)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </instance>
</routing-instances>
</configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ fec—Filter based on FEC associated to the traced object.

 <policy>—Filter policy.

<filter> (configuration/routing-instances/instance/protocols/pim/traceoptions/flag)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </pim>
 </protocols>
 </instance>
</routing-instances>
</configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/routing-instances/instance/protocols/rip/traceoptions/flag)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

 <policy>—Filter policy.

<filter> (configuration/routing-instances/instance/routing-options/flow/validation/traceoptions/flag)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <flow>
          <validation>
            <traceoptions>
              <flag>
                <filter>
                  <match-on>match-on-choice</match-on>    <!-- mandatory -->
                  <policy>...</policy>    <!-- mandatory -->
                </filter>
              </flag>
            </traceoptions>
          </validation>
        </flow>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>

```

Description Filter to apply to tracing.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.
- route-attribute—Filter based on route attributes.

<policy>—Filter policy.

<filter> (configuration/routing-options/flow/validation/traceoptions/flag)

Usage <configuration>
 <routing-options>
 <flow>
 <validation>
 <traceoptions>
 <flag>
 <filter>
 <match-on>*match-on-choice*</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </validation>
 </flow>
 </routing-options>
 </configuration>

Description Filter to apply to tracing.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.
 - route-attribute—Filter based on route attributes.
- <policy>—Filter policy.

<filter> (configuration/services/l2tp/traceoptions)

Usage <configuration>
 <services>
 <l2tp>
 <traceoptions>
 <filter>
 <protocol>...</protocol>
 <user-name>*user-name*</user-name>
 </filter>
 </traceoptions>
 </l2tp>
 </services>
 </configuration>

Description Filter to control trace messages.

Contents <protocol>—Additional filter for protocol.

<user-name>—Additional filter by user name.

<filter-profile> (configuration/accounting-options)

Usage <configuration>
 <accounting-options>
 <filter-profile>
 <name>*name*</name> <!-- identifier -->
 <file>*file*</file>
 <interval>*minutes*</interval>
 <counters>...</counters> <!-- mandatory -->
 </filter-profile>
 </accounting-options>
 </configuration>

Description Filter profile for accounting data.

Contents <counters>—Name of counter.
 <file>—Name of file for accounting data.
 <interval>—Polling interval.
 <name>—Name of profile.

<filtering-server> (configuration/services/ggsn/apn/p-cscf)

Usage <configuration>
 <services>
 <ggsn>
 <apn>
 <p-cscf>
 <filtering-server>
 <name>*name*</name> <!-- identifier -->
 </filtering-server>
 </p-cscf>
 </apn>
 </ggsn>
 </services>
 </configuration>

Description IPv4 P-CSCF filtering server.

Contents <name>—IPv4 filtering server address.

<finger> (configuration/system/services)

- Usage** `<configuration>`
 `<system>`
 `<services>`
 `<finger>`
 `<connection-limit>`*connection-limit*`</connection-limit>`
 `<rate-limit>`*rate-limit*`</rate-limit>`
 `</finger>`
 `</services>`
 `</system>`
`</configuration>`
- Description** Allow finger requests from remote systems.
- Contents** `<connection-limit>`—Maximum number of allowed connections.
 `<rate-limit>`—Maximum number of connections per minute.

<firewall> (configuration)

- Usage** `<configuration>`
 `<firewall>`
 `<policer>`...`</policer>`
 `<interface-set>`...`</interface-set>`
 `<load-balance-group>`...`</load-balance-group>`
 `<three-color-policer>`...`</three-color-policer>`
 `<family>`...`</family>`
 `<filter>`...`</filter>`
 `</firewall>`
`</configuration>`
- Description** Define a firewall configuration.
- Contents** `<family>`—Protocol family.
 `<filter>`—Define an IPv4 firewall filter.
 `<interface-set>`—Interface set definition.
 `<load-balance-group>`—Load-balance group definition.
 `<policer>`—Policer template definition.
 `<three-color-policer>`—Three-color policer.

<firewall> (configuration/logical-systems)

Usage	<pre> <configuration> <logical-systems> <firewall> <policer>...</policer> <interface-set>...</interface-set> <load-balance-group>...</load-balance-group> <three-color-policer>...</three-color-policer> <family>...</family> <filter>...</filter> </firewall> </logical-systems> </configuration> </pre>
Description	Define a firewall configuration.
Contents	<p><family>—Protocol family.</p> <p><filter>—Define an IPv4 firewall filter.</p> <p><interface-set>—Interface set definition.</p> <p><load-balance-group>—Load-balance group definition.</p> <p><policer>—Policer template definition.</p> <p><three-color-policer>—Three-color policer.</p>

<firewall-user> (configuration/access/profile/client)

Usage	<pre> <configuration> <access> <profile> <client> <firewall-user> <password>password</password> </firewall-user> </client> </profile> </access> </configuration> </pre>
Description	Client is configured as a firewall user.
Contents	<password>—Password for user.

<fixed-address> (configuration/system/services/dhcp/static-binding)

Usage <configuration>
 <system>
 <services>
 <dhcp>
 <static-binding>
 <fixed-address>
 <name>*name*</name> <!-- identifier -->
 </fixed-address>
 </static-binding>
 </dhcp>
 </services>
 </system>
 </configuration>

Description Possible IP addresses to assign to host.

Contents <name>—IPv4 address.

<flag> (configuration/access/address-assignment/pool/family/inet/dhcp-attributes/option/array)

Usage

```

<configuration>
  <access>
    <address-assignment>
      <pool>
        <family>
          <inet>
            <dhcp-attributes>
              <option>
                <array>
                  <flag>
                    <name>name</name>    <!-- identifier -->
                  </flag>
                </array>
              </option>
            </dhcp-attributes>
          </inet>
        </family>
      </pool>
    </address-assignment>
  </access>
</configuration>

```

Description Array of boolean flag values.

Contents <name>—Array of boolean flag values.

- false—False value.
- off—Off value.
- on—On value.
- true—True value.

<flag> (configuration/bridge-domains/domain/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </domain>
 </bridge-domains>
</configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/bridge-domains/domain/multicast-snooping-options/traceoptions)

Usage <configuration>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/bridge-domains/domain/protocols/igmp-snooping/traceoptions)

Usage <configuration>
 <bridge-domains>
 <domain>
 <protocols>
 <igmp-snooping>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp-snooping>
 </protocols>
 </domain>
 </bridge-domains>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/chassis/system-domains/traceoptions)

Usage <configuration>
 <chassis>
 <system-domains>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </system-domains>
 </chassis>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- init—Trace initialization messages.
- ipc—Trace IPC messages.
- psd—Trace psd messages.
- rtsock—Trace rtsock messages.

<flag> (configuration/class-of-service/traceoptions)

Usage <configuration>
 <class-of-service>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </class-of-service>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- asynch—Trace asynchronous configuration processing.
- dynamic—Trace dynamic CoS functions.
- hardware-database—Trace chassis hardware database related processing.
- init—Trace initialization events.
- parse—Trace parser processing.
- process—Trace configuration processing.
- restart—Trace restart processing.
- route-socket—Trace route-socket events.
- show—Trace show command servicing.
- snmp—Trace SNMP-related processing.
- util—Trace utilities.

<flag> (configuration/dynamic-profiles/class-of-service/traceoptions)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- asynch—Trace asynchronous configuration processing.
- dynamic—Trace dynamic CoS functions.
- hardware-database—Trace chassis hardware database related processing.
- init—Trace initialization events.
- parse—Trace parser processing.
- process—Trace configuration processing.
- restart—Trace restart processing.
- route-socket—Trace route-socket events.
- show—Trace show command servicing.
- snmp—Trace SNMP-related processing.
- util—Trace utilities.

<flag> (configuration/dynamic-profiles/interfaces/interface/traceoptions)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <interface>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </interface>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Enable all interface trace flags.
- event—Trace interface events.
- ipc—Trace interface IPC messages.
- media—Trace interface media changes.

<flag> (configuration/dynamic-profiles/interfaces/traceoptions)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Enable all configuration logging.
- change-events—Log changes that produce configuration events.
- config-states—Log the configuration state machine changes.
- kernel—Log configuration IPC messages to kernel.
- kernel-detail—Log details of configuration messages to kernel.

<flag> (configuration/dynamic-profiles/protocols/igmp/traceoptions)

Usage <configuration>
 <dynamic-profiles>
 <protocols>
 <igmp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp>
 </protocols>
 </dynamic-profiles>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- client-notification—Trace notifications.
- general—Trace general events.
- group—Trace group operations.
- host-notification—Trace host notifications.
- leave—Trace leave group messages (IGMPv2 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.

- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

`<flag>` (configuration/event-options/event-script/traceoptions)

Usage `<configuration>`
 `<event-options>`
 `<event-script>`
 `<traceoptions>`
 `<flag>`
 `<name>name</name>` `<!-- identifier -->`
 `</flag>`
 `</traceoptions>`
 `</event-script>`
 `</event-options>`
`</configuration>`

Description Tracing parameters.

Contents `<name>`—No documentation is available yet.

- `all`—Trace all operations.
- `events`—Trace important events.
- `input`—Trace script input data.
- `offline`—Generate data for offline development.
- `output`—Trace script output data.
- `rpc`—Trace script RPCs.
- `xslt`—Trace the XSLT library.

<flag> (configuration/event-options/traceoptions)

Usage <configuration>
 <event-options>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </event-options>
 </configuration>

Description List of event types to include in trace.

Contents <name>—No documentation is available yet.

- all—Everything.
- configuration—Reading of configuration.
- database—Events involving storage and retrieval in events database.
- events—Event processing.
- policy—Policy processing.
- registration—Event registration.
- server—Communication with processes that are generating events.
- syslogd—Syslog related traces.
- timer-events—Internally generated events.

<flag> (configuration/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/forwarding-options/helpers/traceoptions)

Usage <configuration>
 <forwarding-options>
 <helpers>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </helpers>
 </forwarding-options>
 </configuration>

Description Area of UDP forwarding helper process on which to enable debugging output.

Contents <name>—No documentation is available yet.

- address—Trace address management code.
- all—Trace all areas of code.
- bootp—Trace BOOTP/DHCP service-specific code.
- config—Trace configuration code.
- domain—Trace DNS service-specific code.
- ifdb—Trace interface database code.
- io—Trace I/O code.
- main—Trace main loop code.
- port—Trace arbitrary protocol code.
- rtsock—Trace routing socket code.
- tftp—Trace TFTP service-specific code.
- trace—Trace tracing code.
- ui—Trace user interface code.
- util—Trace miscellaneous utility code.

<flag> (configuration/interfaces/interface/traceoptions)

Usage <configuration>
 <interfaces>
 <interface>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </interface>
 </interfaces>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Enable all interface trace flags.
- event—Trace interface events.
- ipc—Trace interface IPC messages.
- media—Trace interface media changes.

<flag> (configuration/interfaces/traceoptions)

Usage <configuration>
 <interfaces>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </interfaces>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Enable all configuration logging.
- change-events—Log changes that produce configuration events.
- config-states—Log the configuration state machine changes.
- kernel—Log configuration IPC messages to kernel.
- kernel-detail—Log details of configuration messages to kernel.

<flag> (configuration/jnx-example/traceoptions)

Usage `<configuration>
 <jnx-example>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </jnx-example>
</configuration>`

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- routing-socket—Trace routing socket events.

<flag> (configuration/logical-systems/access/address-assignment/pool/family/inet/dhcp-attributes/option/array)

Usage

```

<configuration>
  <logical-systems>
    <access>
      <address-assignment>
        <pool>
          <family>
            <inet>
              <dhcp-attributes>
                <option>
                  <array>
                    <flag>
                      <name>name</name>    <!-- identifier -->
                    </flag>
                  </array>
                </option>
              </dhcp-attributes>
            </inet>
          </family>
        </pool>
      </address-assignment>
    </access>
  </logical-systems>
</configuration>

```

Description Array of boolean flag values.

Contents <name>—Array of boolean flag values.

- false—False value.
- off—Off value.
- on—On value.
- true—True value.

<flag> (configuration/logical-systems/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <logical-systems>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </logical-systems>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/logical-systems/protocols/bfd/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bfd>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </bfd>
 </protocols>
 </logical-systems>
 </configuration>

Description Trace flag information.

Contents <name>—No documentation is available yet.

- adjacency—Trace adjacency messages.
- all—Trace everything.
- error—Trace all errors.
- event—Trace all events.
- issu—Trace ISSU packet activity.
- nsr-packet—Trace packet activity of NSR.
- nsr-synchronization—Trace NSR synchronization events.
- packet—Trace all packets.
- pipe—Trace pipe messages.
- pipe-detail—Trace pipe messages in detail.
- ppm-packet—Trace packet activity by periodic packet management.
- state—Trace state transitions.
- timer—Trace timer processing.

<flag> (configuration/logical-systems/protocols/bgp/group/neighbor/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <group>
          <neighbor>
            <traceoptions>
              <flag>
                <name>name</name>    <!-- identifier -->
                <send/>
                <receive/>
                <detail/>
                <disable/>
                <filter>...</filter>
              </flag>
            </traceoptions>
          </neighbor>
        </group>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.

- **packets**—Trace all BGP protocol packets.
- **policy**—Trace policy processing.
- **refresh**—Trace BGP refresh packets.
- **route**—Trace routing information.
- **state**—Trace state transitions.
- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.
- **update**—Trace BGP update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/bgp/group/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.

- **policy**—Trace policy processing.
 - **refresh**—Trace BGP refresh packets.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **update**—Trace BGP update packets.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/bgp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.
- policy—Trace policy processing.

- **refresh**—Trace BGP refresh packets.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **update**—Trace BGP update packets.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/dot1x/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <dot1x>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </dot1x>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- dot1x-debug—Trace dot1x events.
- eapol—Trace EAPOL Transmit/Receive.
- general—Trace general events.
- normal—Trace normal events.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol task timer processing.

<flag> (configuration/logical-systems/protocols/dvmrp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <dvmrp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </dvmrp>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- graft—Trace graft messages.
- neighbor—Trace neighbor probe packets.
- normal—Trace normal events.
- packets—Trace all DVMRP packets.
- poison—Trace poison-route-reverse packets.
- policy—Trace policy processing.
- probe—Trace probe packets.
- prune—Trace prune messages.
- report—Trace DVMRP route report packets.
- route—Trace routing information.
- state—Trace state transitions.

- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/esis/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <esis>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </esis>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errored packets.
- esh—Trace end system hello packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- ish—Trace intermediate system hello packets.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/igmp/traceoptions)

Usage

```
<configuration>
  <logical-systems>
    <protocols>
      <igmp>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <send/>
            <receive/>
            <detail/>
            <disable/>
          </flag>
        </traceoptions>
      </igmp>
    </protocols>
  </logical-systems>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- client-notification—Trace notifications.
- general—Trace general events.
- group—Trace group operations.
- host-notification—Trace host notifications.
- leave—Trace leave group messages (IGMPv2 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.

- **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/igmp-host/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <igmp-host>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp-host>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/ilmi/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ilmi>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </ilmi>
 </protocols>
 </logical-systems>
</configuration>

Description Tracing parameters.

- Contents** <name>—No documentation is available yet.
- all—Trace all areas of code.
 - database—Trace database events.
 - debug—Trace debug messages.
 - event—Trace event handler events.
 - packet—Trace packet events.
 - routing-socket—Trace Routing socket events.
 - state—Trace state change events.

<flag> (configuration/logical-systems/protocols/isis/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <isis>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <send/>
            <receive/>
            <detail/>
            <disable/>
          </flag>
        </traceoptions>
      </isis>
    </protocols>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- csn—Trace complete sequence number (CSN) packets.
- error—Trace errored packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between IS-IS and LDP.
- lsp—Trace link-state packets.
- lsp-generation—Trace LSP generation.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace IS-IS packets.
- policy—Trace policy processing.

- `psn`—Trace partial sequence number (PSN) packets.
- `route`—Trace routing information.
- `spf`—Trace SPF events.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/l2circuit/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <l2circuit>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </l2circuit>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- connections—Trace Layer 2 circuit connections.
- error—Trace errors.
- fec—Trace Layer 2 circuit VC FEC advertisements.
- general—Trace general events.
- normal—Trace normal events.
- oam—Trace Layer 2 circuit OAM messages.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- topology—Trace Layer 2 circuit topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/l2iw/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <l2iw>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </l2iw>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errors.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/lacp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <lacp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </lacp>
 </protocols>
 </logical-systems>
 </configuration>

Description Events and packet types to include in the trace.

Contents <name>—No documentation is available yet.

- all—All events and packets.
- configuration—Configuration events.
- packet—LACP packets.
- process—Process events.
- protocol—Protocol events.
- routing-socket—Routing socket events.
- startup—Process startup events.

<flag> (configuration/logical-systems/protocols/layer2-control/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <layer2-control>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </layer2-control>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- regex-parse—Trace regular-expression parsing.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol task timer processing.

<flag> (configuration/logical-systems/protocols/ldp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ldp>
 <traceoptions>
<flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
</flag>
 </traceoptions>
 </ldp>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- address—Trace address packets.
- all—Trace everything.
- binding—Trace label binding state.
- error—Trace errored packets.
- event—Trace LDP state machine events.
- general—Trace general events.
- initialization—Trace initialization packets.
- label—Trace label packets.
- normal—Trace normal events.
- notification—Trace notification packets.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all LDP packets.

- `path`—Trace label path state.
- `periodic`—Trace periodic (hello and keepalive) packets.
- `policy`—Trace policy processing.
- `ppmd`—Trace state and events for ppm process.
- `route`—Trace routing information.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/link-management/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <link-management>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </link-management>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- hello-packets—Trace hello packet processing.
- init—Trace initialization events.
- packets—Trace packet processing.
- parse—Trace parser processing.
- process—Trace general configuration processing.
- route-socket—Trace route-socket events.
- routing—Trace routing protocols interworking.
- server—Trace server processing.
- show—Trace show command servicing.
- state—Trace state transitions.

<flag> (configuration/logical-systems/protocols/mld/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mld>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </mld>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- client-notification—Trace notifications.
- general—Trace general events.
- group—Trace group operations.
- host-notification—Trace host notifications.
- leave—Trace leave group messages (MLDv2 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all MLD packets.
- policy—Trace policy processing.
- query—Trace MLD membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.

- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/mld-host/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mld-host>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </mld-host>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (MLDv1 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all MLD packets.
- policy—Trace policy processing.
- query—Trace MLD membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/mpls/label-switched-path/oam/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <oam>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- database—Trace database activity.
- network—Trace network activity.
- pipe—Trace pipe activity.
- rpc-packet-details—Trace RPC packet details.
- traceroute—Trace traceroute activity.

<flag> (configuration/logical-systems/protocols/mpls/label-switched-path/primary/oam/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <oam>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- database—Trace database activity.
- network—Trace network activity.
- pipe—Trace pipe activity.
- rpc-packet-details—Trace RPC packet details.
- traceroute—Trace traceroute activity.

**<flag> (configuration/logical-systems/protocols/mpls/
label-switched-path/secondary/oam/traceoptions)**

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <oam>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- database—Trace database activity.
- network—Trace network activity.
- pipe—Trace pipe activity.
- rpc-packet-details—Trace RPC packet details.
- traceroute—Trace traceroute activity.

<flag> (configuration/logical-systems/protocols/mpls/label-switched-path/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <label-switched-path>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </label-switched-path>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- cspf—Trace CSPF computation.
- cspf-link—Trace links visited during CSPF.
- cspf-node—Trace nodes visited during CSPF.
- state—Trace state transitions.

<flag> (configuration/logical-systems/protocols/mpls/oam/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <oam>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- database—Trace database activity.
- network—Trace network activity.
- pipe—Trace pipe activity.
- rpc-packet-details—Trace RPC packet details.
- traceroute—Trace traceroute activity.

<flag> (configuration/logical-systems/protocols/mpls/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mpls>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </mpls>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- connection—Trace CCC activity.
- connection-detail—Trace CCC activity in detail.
- cspf—Trace CSPF computation.
- cspf-link—Trace links visited during CSPF.
- cspf-node—Trace nodes visited during CSPF.
- error—Trace error conditions.
- graceful-restart—Trace graceful-restart-related events.
- lsping—Trace LSP ping packets received.
- state—Trace state transitions.

<flag> (configuration/logical-systems/protocols/msdp/group/peer/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <msdp>
        <group>
          <peer>
            <traceoptions>
              <flag>
                <name>name</name>    <!-- identifier -->
                <send/>
                <receive/>
                <detail/>
                <disable/>
              </flag>
            </traceoptions>
          </peer>
        </group>
      </msdp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.

- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/msdp/group/traceoptions)

Usage

```
<configuration>
  <logical-systems>
    <protocols>
      <msdp>
        <group>
          <traceoptions>
            <flag>
              <name>name</name>    <!-- identifier -->
              <send/>
              <receive/>
              <detail/>
              <disable/>
            </flag>
          </traceoptions>
        </group>
      </msdp>
    </protocols>
  </logical-systems>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/msdp/peer/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <msdp>
        <peer>
          <traceoptions>
            <flag>
              <name>name</name>    <!-- identifier -->
              <send/>
              <receive/>
              <detail/>
              <disable/>
            </flag>
          </traceoptions>
        </peer>
      </msdp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/msdp/traceoptions)

Usage

```
<configuration>
  <logical-systems>
    <protocols>
      <msdp>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <send/>
            <receive/>
            <detail/>
            <disable/>
          </flag>
        </traceoptions>
      </msdp>
    </protocols>
  </logical-systems>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/mstp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <mstp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </mstp>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.
- state-machine-variables—Trace when state machine variables change.
- timers—Trace protocol timers.
- topology-change-state-machine—Trace topology change state machine.

**<flag> (configuration/logical-systems/protocols/
neighbor-discovery/secure/traceoptions)**

Usage <configuration>
 <logical-systems>
 <protocols>
 <neighbor-discovery>
 <secure>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </secure>
 </neighbor-discovery>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- cryptographic-address—Trace Cryptographically Generated Address events.
- protocol—Trace protocol processing events.
- rsa—Trace RSA events.

<flag> (configuration/logical-systems/protocols/oam/ethernet/connectivity-fault-management/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <oam>
        <ethernet>
          <connectivity-fault-management>
            <traceoptions>
              <flag>
                <name>name</name>    <!-- identifier -->
              </flag>
            </traceoptions>
          </connectivity-fault-management>
        </ethernet>
      </oam>
    </protocols>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- error—Trace events related to catastrophic errors in daemon.
- init—Trace events related to protocol daemon start-up.
- protocol—Trace protocol processing events.
- routing-socket—Trace routing socket events.

<flag> (configuration/logical-systems/protocols/oam/ethernet/link-fault-management/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <oam>
 <ethernet>
 <link-fault-management>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </link-fault-management>
 </ethernet>
 </oam>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- action-profile—Trace action profile invocation events.
- all—Trace everything.
- configuration—Trace configuration events.
- protocol—Trace protocol processing events.
- routing-socket—Trace routing socket events.

<flag> (configuration/logical-systems/protocols/ospf/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <ospf>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <send/>
            <receive/>
            <detail/>
            <disable/>
          </flag>
        </traceoptions>
      </ospf>
    </protocols>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.
- normal—Trace normal events.

- **nsr-synchronization**—Trace NSR synchronization events.
 - **on-demand**—Trace demand circuit extensions.
 - **packet-dump**—Dump the contents of selected packet types.
 - **packets**—Trace all OSPF packets.
 - **policy**—Trace policy processing.
 - **route**—Trace routing information.
 - **spf**—Trace SPF calculations.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/ospf3/realm/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <ospf3>
        <realm>
          <traceoptions>
            <flag>
              <name>name</name>    <!-- identifier -->
              <send/>
              <receive/>
              <detail/>
              <disable/>
            </flag>
          </traceoptions>
        </realm>
      </ospf3>
    </protocols>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.

- **normal**—Trace normal events.
 - **nsr-synchronization**—Trace NSR synchronization events.
 - **on-demand**—Trace demand circuit extensions.
 - **packet-dump**—Dump the contents of selected packet types.
 - **packets**—Trace all OSPF packets.
 - **policy**—Trace policy processing.
 - **route**—Trace routing information.
 - **spf**—Trace SPF calculations.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/ospf3/traceoptions)

Usage

```
<configuration>
  <logical-systems>
    <protocols>
      <ospf3>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <send/>
            <receive/>
            <detail/>
            <disable/>
          </flag>
        </traceoptions>
      </ospf3>
    </protocols>
  </logical-systems>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.
- normal—Trace normal events.

- **nsr-synchronization**—Trace NSR synchronization events.
 - **on-demand**—Trace demand circuit extensions.
 - **packet-dump**—Dump the contents of selected packet types.
 - **packets**—Trace all OSPF packets.
 - **policy**—Trace policy processing.
 - **route**—Trace routing information.
 - **spf**—Trace SPF calculations.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/pgm/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <pgm>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </pgm>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- init—Trace initialization events.
- packets—Trace packet processing.
- parse—Trace parser processing.
- route-socket—Trace route-socket events.
- show—Trace show command servicing.
- state—Trace state transitions.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/pim/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
</pim>
</protocols>
</logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- assert—Trace assert messages.
- autorp—Trace bootstrap/RP/auto-RP messages.
- bootstrap—Trace bootstrap/RP/auto-RP messages.
- general—Trace general events.
- graft—Trace join/prune/graft/graft-ack messages.
- hello—Trace hello packets.
- join—Trace join/prune/graft/graft-ack messages.
- mdt—Trace messages related to multicast data tunnels.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all PIM packets.

- **policy**—Trace policy processing.
- **prune**—Trace join/prune/graft/graft-ack messages.
- **register**—Trace register/register-stop messages.
- **route**—Trace routing information.
- **rp**—Trace bootstrap/RP/auto-RP messages.
- **state**—Trace state transitions.
- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/ppp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ppp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </ppp>
 </protocols>
 </logical-systems>
 </configuration>

Description Area of PPP process to enable debugging output.

Contents <name>—No documentation is available yet.

- access—Trace access code.
- address-pool—Trace address pool code.
- all—Trace all areas of code.
- auth—Trace authentication code.
- chap—Trace CHAP code.
- ci—Trace ci code.
- config—Trace configuration code.
- ifdb—Trace interface database code.
- lcp—Trace LCP state machine code.
- memory—Trace memory management code.
- message—Trace message processing code.
- mlppp—Trace MLPPP code.
- ncp—Trace NCP state machine code.
- pap—Trace PAP code.
- ppp—Trace PPP protocol processing code.
- radius—Trace RADIUS processing code.
- redundancy—Trace redundancy code.
- rtsock—Trace routing socket code.

- **session**—Trace session management code.
- **signal**—Trace signal handling code.
- **timer**—Trace timer code.
- **ui**—Trace user interface code.

<flag> (configuration/logical-systems/protocols/rip/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- auth—Trace RIP authentication.
- error—Trace RIP errors.
- expiration—Trace RIP route expiration processing.
- general—Trace general events.
- holddown—Trace RIP hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIP packets.
- policy—Trace policy processing.
- request—Trace RIP information packets.
- route—Trace routing information.

- **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **trigger**—Trace RIP triggered updates.
 - **update**—Trace RIP update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/ripng/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <ripng>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ripng>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace RIPng errors.
- expiration—Trace RIPng route expiration processing.
- general—Trace general events.
- holddown—Trace RIPng hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIPng packets.
- policy—Trace policy processing.
- request—Trace RIPng information packets.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- timer—Trace routing protocol timer processing.
 - trigger—Trace RIPng triggered updates.
 - update—Trace RIPng update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/ router-advertisement/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <router-advertisement>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </router-advertisement>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/protocols/router-discovery/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <router-discovery>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </router-discovery>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/protocols/rstp/traceoptions)

Usage

```
<configuration>
  <logical-systems>
    <protocols>
      <rstp>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <disable/>
          </flag>
        </traceoptions>
      </rstp>
    </protocols>
  </logical-systems>
</configuration>
```

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- ppmmd—Trace state and events for ppmmd process.
- state-machine-variables—Trace when state machine variables change.
- timers—Trace protocol timers.
- topology-change-state-machine—Trace topology change state machine.

<flag> (configuration/logical-systems/protocols/rsvp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <rsvp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </rsvp>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace error conditions.
- event—Trace RSVP related events.
- Imp—Trace RSVP-LMP related interactions.
- packets—Trace all RSVP packets.
- path—Trace RSVP path messages.
- pathtear—Trace RSVP PathTear messages.
- resv—Trace RSVP Resv messages.
- resvtear—Trace RSVP ResvTear messages.
- route—Trace routing information.
- state—Trace state transitions.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/protocols/vrrp/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <vrrp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </vrrp>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace all events.
- database—Trace database.
- general—Trace general events.
- interfaces—Trace interface messages.
- normal—Trace normal events.
- packets—Trace packets.
- state—Trace state transitions.
- timer—Trace timer events.

<flag> (configuration/logical-systems/protocols/vstp/vlan/traceoptions)

Usage <configuration>
 <logical-systems>
 <protocols>
 <vstp>
 <vlan>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </vlan>
 </vstp>
 </protocols>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.
- state-machine-variables—Trace when state machine variables change.
- timers—Trace protocol timers.

- topology-change-state-machine—Trace topology change state machine.

<flag> (configuration/logical-systems/routing-instances/instance/access/address-assignment/pool/family/inet/dhcp-attributes/option/array)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <access>
 <address-assignment>
 <pool>
 <family>
 <inet>
 <dhcp-attributes>
 <option>
 <array>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </array>
 </option>
 </dhcp-attributes>
 </inet>
 </family>
 </pool>
 </address-assignment>
 </access>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Array of boolean flag values.

Contents <name>—Array of boolean flag values.

- false—False value.
- off—Off value.
- on—On value.
- true—True value.

<flag> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.

- **session-db**—Session database operations.
- **state**—State-transition operations.
- **ui**—User Interface operations.

<flag> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/multicast-snooping-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/protocols/igmp-snooping/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <bridge-domains>
          <domain>
            <protocols>
              <igmp-snooping>
                <traceoptions>
                  <flag>
                    <name>name</name>    <!-- identifier -->
                    <send/>
                    <receive/>
                    <detail/>
                    <disable/>
                  </flag>
                </traceoptions>
              </igmp-snooping>
            </protocols>
          </domain>
        </bridge-domains>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.

- **route**—Trace routing information.
- **state**—Trace state transitions.
- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.

- ui—User Interface operations.

<flag> (configuration/logical-systems/routing-instances/instance/forwarding-options/helpers/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <helpers>
 <traceoptions>
<flag>
 <name>*name*</name> <!-- identifier -->
</flag>
 </traceoptions>
 </helpers>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Area of UDP forwarding helper process on which to enable debugging output.

Contents <name>—No documentation is available yet.

- address—Trace address management code.
- all—Trace all areas of code.
- bootp—Trace BOOTP/DHCP service-specific code.
- config—Trace configuration code.
- domain—Trace DNS service-specific code.
- ifdb—Trace interface database code.
- io—Trace I/O code.
- main—Trace main loop code.
- port—Trace arbitrary protocol code.
- rtsock—Trace routing socket code.
- tftp—Trace TFTP service-specific code.
- trace—Trace tracing code.
- ui—Trace user interface code.
- util—Trace miscellaneous utility code.

<flag> (configuration/logical-systems/routing-instances/instance/multicast-snooping-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <multicast-snooping-options>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast-snooping-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.

- `nsr-synchronization`—Trace NSR synchronization events.
 - `open`—Trace BGP open packets.
 - `packets`—Trace all BGP protocol packets.
 - `policy`—Trace policy processing.
 - `refresh`—Trace BGP refresh packets.
 - `route`—Trace routing information.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
 - `update`—Trace BGP update packets.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <traceoptions>
                <flag>
                  <name>name</name>    <!-- identifier -->
                  <send/>
                  <receive/>
                  <detail/>
                  <disable/>
                  <filter>...</filter>
                </flag>
              </traceoptions>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.

- **open**—Trace BGP open packets.
 - **packets**—Trace all BGP protocol packets.
 - **policy**—Trace policy processing.
 - **refresh**—Trace BGP refresh packets.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **update**—Trace BGP update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/bgp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.

- **packets**—Trace all BGP protocol packets.
- **policy**—Trace policy processing.
- **refresh**—Trace BGP refresh packets.
- **route**—Trace routing information.
- **state**—Trace state transitions.
- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.
- **update**—Trace BGP update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/esis/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <esis>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </esis>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errored packets.
- esh—Trace end system hello packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- ish—Trace intermediate system hello packets.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/igmp-snooping/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <igmp-snooping>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp-snooping>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/isis/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- csn—Trace complete sequence number (CSN) packets.
- error—Trace errored packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between IS-IS and LDP.
- lsp—Trace link-state packets.
- lsp-generation—Trace LSP generation.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.

- **packets**—Trace IS-IS packets.
- **policy**—Trace policy processing.
- **psn**—Trace partial sequence number (PSN) packets.
- **route**—Trace routing information.
- **spf**—Trace SPF events.
- **state**—Trace state transitions.
- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/l2vpn/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- automatic-site—Trace VPLS automatic site state.
- connections—Trace Layer 2 VPN and VPLS connections.
- error—Trace errors.
- general—Trace general events.
- nlri—Trace Layer 2 VPN and VPLS remote site advertisements.
- normal—Trace normal events.
- oam—Trace LDP VPLS pseudowire OAM messages.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.

- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.
- **topology**—Trace Layer 2 VPN and VPLS topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/ldp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- address—Trace address packets.
- all—Trace everything.
- binding—Trace label binding state.
- error—Trace errored packets.
- event—Trace LDP state machine events.
- general—Trace general events.
- initialization—Trace initialization packets.
- label—Trace label packets.
- normal—Trace normal events.
- notification—Trace notification packets.

- `nsr-synchronization`—Trace NSR synchronization events.
 - `packets`—Trace all LDP packets.
 - `path`—Trace label path state.
 - `periodic`—Trace periodic (hello and keepalive) packets.
 - `policy`—Trace policy processing.
 - `ppmd`—Trace state and events for ppm process.
 - `route`—Trace routing information.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.

- **source-active-response**—Trace source-active response messages.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/msdp/group/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <msdp>
            <group>
              <traceoptions>
                <flag>
                  <name>name</name>    <!-- identifier -->
                  <send/>
                  <receive/>
                  <detail/>
                  <disable/>
                </flag>
              </traceoptions>
            </group>
          </msdp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.

- **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.

- **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/msdp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.

- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/mstp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <mstp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </mstp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.
- state-machine-variables—Trace when state machine variables change.

- `timers`—Trace protocol timers.
- `topology-change-state-machine`—Trace topology change state machine.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/mvpn/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <mvpn>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </mvpn>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errors.
- general—Trace general events.
- nlri—Trace MVPN advertisements.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- topology—Trace MVPN topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/ospf/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.

- `lsa-update`—Trace LSA update packets.
 - `normal`—Trace normal events.
 - `nsr-synchronization`—Trace NSR synchronization events.
 - `on-demand`—Trace demand circuit extensions.
 - `packet-dump`—Dump the contents of selected packet types.
 - `packets`—Trace all OSPF packets.
 - `policy`—Trace policy processing.
 - `route`—Trace routing information.
 - `spf`—Trace SPF calculations.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/ospf3/realm/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ospf3>
 <realm>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </realm>
 </ospf3>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.

- `lsa-request`—Trace LSA request packets.
- `lsa-update`—Trace LSA update packets.
- `normal`—Trace normal events.
- `nsr-synchronization`—Trace NSR synchronization events.
- `on-demand`—Trace demand circuit extensions.
- `packet-dump`—Dump the contents of selected packet types.
- `packets`—Trace all OSPF packets.
- `policy`—Trace policy processing.
- `route`—Trace routing information.
- `spf`—Trace SPF calculations.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/ospf3/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ospf3>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ospf3>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.

- `lsa-update`—Trace LSA update packets.
 - `normal`—Trace normal events.
 - `nsr-synchronization`—Trace NSR synchronization events.
 - `on-demand`—Trace demand circuit extensions.
 - `packet-dump`—Dump the contents of selected packet types.
 - `packets`—Trace all OSPF packets.
 - `policy`—Trace policy processing.
 - `route`—Trace routing information.
 - `spf`—Trace SPF calculations.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/pim/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- assert—Trace assert messages.
- autorp—Trace bootstrap/RP/auto-RP messages.
- bootstrap—Trace bootstrap/RP/auto-RP messages.
- general—Trace general events.
- graft—Trace join/prune/graft/graft-ack messages.
- hello—Trace hello packets.
- join—Trace join/prune/graft/graft-ack messages.
- mdt—Trace messages related to multicast data tunnels.
- normal—Trace normal events.

- **nsr-synchronization**—Trace NSR synchronization events.
 - **packets**—Trace all PIM packets.
 - **policy**—Trace policy processing.
 - **prune**—Trace join/prune/graft/graft-ack messages.
 - **register**—Trace register/register-stop messages.
 - **route**—Trace routing information.
 - **rp**—Trace bootstrap/RP/auto-RP messages.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/rip/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- auth—Trace RIP authentication.
- error—Trace RIP errors.
- expiration—Trace RIP route expiration processing.
- general—Trace general events.
- holddown—Trace RIP hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIP packets.
- policy—Trace policy processing.

- **request**—Trace RIP information packets.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **trigger**—Trace RIP triggered updates.
 - **update**—Trace RIP update packets.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/ripng/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <ripng>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ripng>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace RIPng errors.
- expiration—Trace RIPng route expiration processing.
- general—Trace general events.
- holddown—Trace RIPng hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIPng packets.
- policy—Trace policy processing.
- request—Trace RIPng information packets.
- route—Trace routing information.

- `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
 - `trigger`—Trace RIPng triggered updates.
 - `update`—Trace RIPng update packets.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

`<flag>` (configuration/logical-systems/routing-instances/instance/protocols/router-discovery/traceoptions)

Usage `<configuration>`
 `<logical-systems>`
 `<routing-instances>`
 `<instance>`
 `<protocols>`
 `<router-discovery>`
 `<traceoptions>`
 `<flag>`
 `<name>name</name>` `<!-- identifier -->`
 `</flag>`
 `</traceoptions>`
 `</router-discovery>`
 `</protocols>`
 `</instance>`
 `</routing-instances>`
 `</logical-systems>`
`</configuration>`

Description Tracing parameters.

Contents `<name>`—No documentation is available yet.

- `all`—Trace everything.
- `general`—Trace general events.
- `normal`—Trace normal events.
- `policy`—Trace policy processing.
- `route`—Trace routing information.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/rstp/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <rstp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </rstp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.
- state-machine-variables—Trace when state machine variables change.

- `timers`—Trace protocol timers.
- `topology-change-state-machine`—Trace topology change state machine.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/vpls/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <vpls>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </vpls>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- automatic-site—Trace VPLS automatic site state.
- connections—Trace Layer 2 VPN and VPLS connections.
- error—Trace errors.
- general—Trace general events.
- nlri—Trace Layer 2 VPN and VPLS remote site advertisements.
- normal—Trace normal events.
- oam—Trace LDP VPLS pseudowire OAM messages.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.

- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.
- **topology**—Trace Layer 2 VPN and VPLS topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/protocols/vstp/vlan/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <vstp>
 <vlan>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </vlan>
 </vstp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdv—Trace BPDV reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppd—Trace state and events for pppd process.

- `state-machine-variables`—Trace when state machine variables change.
- `timers`—Trace protocol timers.
- `topology-change-state-machine`—Trace topology change state machine.

<flag> (configuration/logical-systems/routing-instances/instance/routing-options/auto-export/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- export—Export processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

 <receive>—Trace received packets.

 <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/routing-options/dynamic-tunnels/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <routing-options>
          <dynamic-tunnels>
            <traceoptions>
              <flag>
                <name>name</name>    <!-- identifier -->
                <send/>
                <receive/>
                <detail/>
                <disable/>
              </flag>
            </traceoptions>
          </dynamic-tunnels>
        </routing-options>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- kernel—Trace kernel communication.
- task—Trace task or job processing.
- tunnel—Trace tunnel addition, change, or deletion.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/routing-options/flow/validation/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <routing-options>
          <flow>
            <validation>
              <traceoptions>
                <flag>
                  <name>name</name>    <!-- identifier -->
                  <send/>
                  <receive/>
                  <detail/>
                  <disable/>
                  <filter>...</filter>
                </flag>
              </traceoptions>
            </validation>
          </flow>
        </routing-options>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to tracing.

<name>—No documentation is available yet.

- all—Trace everything.
- flash—Trace flash processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- resolution—Trace flow to unicast route resolution.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/routing-options/multicast/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <multicast>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.
 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/routing-instances/instance/routing-options/resolution/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <resolution>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </resolution>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- event—Event processing.
- flash—Flash processing.
- indirect—Indirect next-hop addition, change, or deletion.
- kernel—Kernel communication.
- task—Task or job processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-instances/instance/routing-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- condition-manager—Trace condition manager events.
- config-internal—Trace configuration internals.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- normal—Trace normal events.
- nsr-synchronization—Trace nonstop routing synchronization events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- regex-parse—Trace regular-expression parsing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/routing-instances/instance/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.

- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/logical-systems/routing-options/auto-export/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <auto-export>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </auto-export>
 </routing-options>
 </logical-systems>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- export—Export processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-options/dynamic-tunnels/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <dynamic-tunnels>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </dynamic-tunnels>
 </routing-options>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- kernel—Trace kernel communication.
- task—Trace task or job processing.
- tunnel—Trace tunnel addition, change, or deletion.

 <receive>—Trace received packets.

 <send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-options/flow/validation/traceoptions)

Usage

```

<configuration>
  <logical-systems>
    <routing-options>
      <flow>
        <validation>
          <traceoptions>
            <flag>
              <name>name</name>    <!-- identifier -->
              <send/>
              <receive/>
              <detail/>
              <disable/>
              <filter>...</filter>
            </flag>
          </traceoptions>
        </validation>
      </flow>
    </routing-options>
  </logical-systems>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to tracing.

<name>—No documentation is available yet.

- all—Trace everything.
- flash—Trace flash processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- resolution—Trace flow to unicast route resolution.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-options/multicast/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <multicast>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast>
 </routing-options>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/routing-options/resolution/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <resolution>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </resolution>
 </routing-options>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- event—Event processing.
- flash—Flash processing.
- indirect—Indirect next-hop addition, change, or deletion.
- kernel—Kernel communication.
- task—Task or job processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/logical-systems/routing-options/traceoptions)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </routing-options>
 </logical-systems>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- condition-manager—Trace condition manager events.
- config-internal—Trace configuration internals.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- normal—Trace normal events.
- nsr-synchronization—Trace nonstop routing synchronization events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- regex-parse—Trace regular-expression parsing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/logical-systems/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <logical-systems>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </logical-systems>
</configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/multicast-snooping-options/traceoptions)

Usage <configuration>
 <multicast-snooping-options>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast-snooping-options>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/protocols/bfd/traceoptions)

Usage <configuration>
 <protocols>
 <bfd>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </bfd>
 </protocols>
 </configuration>

Description Trace flag information.

Contents <name>—No documentation is available yet.

- adjacency—Trace adjacency messages.
- all—Trace everything.
- error—Trace all errors.
- event—Trace all events.
- issu—Trace ISSU packet activity.
- nsr-packet—Trace packet activity of NSR.
- nsr-synchronization—Trace NSR synchronization events.
- packet—Trace all packets.
- pipe—Trace pipe messages.
- pipe-detail—Trace pipe messages in detail.
- ppm-packet—Trace packet activity by periodic packet management.
- state—Trace state transitions.
- timer—Trace timer processing.

<flag> (configuration/protocols/bgp/group/neighbor/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.

- **policy**—Trace policy processing.
 - **refresh**—Trace BGP refresh packets.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **update**—Trace BGP update packets.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/protocols/bgp/group/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.
- policy—Trace policy processing.

- `refresh`—Trace BGP refresh packets.
 - `route`—Trace routing information.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
 - `update`—Trace BGP update packets.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/protocols/bgp/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.
- policy—Trace policy processing.
- refresh—Trace BGP refresh packets.

- `route`—Trace routing information.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
 - `update`—Trace BGP update packets.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

`<flag>` (configuration/protocols/dot1x/traceoptions)

Usage

```
<configuration>
  <protocols>
    <dot1x>
      <traceoptions>
        <flag>
          <name>name</name>    <!-- identifier -->
          <disable/>
        </flag>
      </traceoptions>
    </dot1x>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents `<disable>`—Disable this trace flag.

`<name>`—No documentation is available yet.

- `all`—Trace everything.
- `config-internal`—Trace configuration internals.
- `dot1x-debug`—Trace dot1x events.
- `eapol`—Trace EAPOL Transmit/Receive.
- `general`—Trace general events.
- `normal`—Trace normal events.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol task timer processing.

<flag> (configuration/protocols/dvmrp/traceoptions)

Usage <configuration>
 <protocols>
 <dvmrp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </dvmrp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- graft—Trace graft messages.
- neighbor—Trace neighbor probe packets.
- normal—Trace normal events.
- packets—Trace all DVMRP packets.
- poison—Trace poison-route-reverse packets.
- policy—Trace policy processing.
- probe—Trace probe packets.
- prune—Trace prune messages.
- report—Trace DVMRP route report packets.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/esis/traceoptions)

Usage <configuration>
 <protocols>
 <esis>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </esis>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errored packets.
- esh—Trace end system hello packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- ish—Trace intermediate system hello packets.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/igmp/traceoptions)

Usage <configuration>
 <protocols>
 <igmp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- client-notification—Trace notifications.
- general—Trace general events.
- group—Trace group operations.
- host-notification—Trace host notifications.
- leave—Trace leave group messages (IGMPv2 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/igmp-host/traceoptions)

Usage <configuration>
 <protocols>
 <igmp-host>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp-host>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/ilmi/traceoptions)

Usage <configuration>
 <protocols>
 <ilmi>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </ilmi>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace all areas of code.
- database—Trace database events.
- debug—Trace debug messages.
- event—Trace event handler events.
- packet—Trace packet events.
- routing-socket—Trace Routing socket events.
- state—Trace state change events.

<flag> (configuration/protocols/isis/traceoptions)

Usage <configuration>
 <protocols>
 <isis>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </isis>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- csn—Trace complete sequence number (CSN) packets.
- error—Trace errored packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between IS-IS and LDP.
- lsp—Trace link-state packets.
- lsp-generation—Trace LSP generation.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace IS-IS packets.
- policy—Trace policy processing.
- psn—Trace partial sequence number (PSN) packets.
- route—Trace routing information.

- `spf`—Trace SPF events.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/protocols/l2circuit/traceoptions)

Usage <configuration>
 <protocols>
 <l2circuit>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </l2circuit>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- connections—Trace Layer 2 circuit connections.
- error—Trace errors.
- fec—Trace Layer 2 circuit VC FEC advertisements.
- general—Trace general events.
- normal—Trace normal events.
- oam—Trace Layer 2 circuit OAM messages.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- topology—Trace Layer 2 circuit topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/l2iw/traceoptions)

Usage <configuration>
 <protocols>
 <l2iw>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </l2iw>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errors.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/lacp/traceoptions)

Usage <configuration>
 <protocols>
 <lacp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </lacp>
 </protocols>
</configuration>

Description Events and packet types to include in the trace.

Contents <name>—No documentation is available yet.

- all—All events and packets.
- configuration—Configuration events.
- packet—LACP packets.
- process—Process events.
- protocol—Protocol events.
- routing-socket—Routing socket events.
- startup—Process startup events.

<flag> (configuration/protocols/layer2-control/traceoptions)

Usage <configuration>
 <protocols>
 <layer2-control>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </layer2-control>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- regex-parse—Trace regular-expression parsing.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol task timer processing.

<flag> (configuration/protocols/ldp/traceoptions)

Usage <configuration>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- address—Trace address packets.
- all—Trace everything.
- binding—Trace label binding state.
- error—Trace errored packets.
- event—Trace LDP state machine events.
- general—Trace general events.
- initialization—Trace initialization packets.
- label—Trace label packets.
- normal—Trace normal events.
- notification—Trace notification packets.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all LDP packets.
- path—Trace label path state.

- **periodic**—Trace periodic (hello and keepalive) packets.
 - **policy**—Trace policy processing.
 - **ppmd**—Trace state and events for ppm process.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/protocols/link-management/traceoptions)

Usage <configuration>
 <protocols>
 <link-management>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </link-management>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- hello-packets—Trace hello packet processing.
- init—Trace initialization events.
- packets—Trace packet processing.
- parse—Trace parser processing.
- process—Trace general configuration processing.
- route-socket—Trace route-socket events.
- routing—Trace routing protocols interworking.
- server—Trace server processing.
- show—Trace show command servicing.
- state—Trace state transitions.

<flag> (configuration/protocols/mld/traceoptions)

Usage <configuration>
 <protocols>
 <mld>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </mld>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- client-notification—Trace notifications.
- general—Trace general events.
- group—Trace group operations.
- host-notification—Trace host notifications.
- leave—Trace leave group messages (MLDv2 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all MLD packets.
- policy—Trace policy processing.
- query—Trace MLD membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/mld-host/traceoptions)

Usage <configuration>
 <protocols>
 <mld-host>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </mld-host>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (MLDv1 only).
- mtrace—Trace mtrace packets.
- normal—Trace normal events.
- packets—Trace all MLD packets.
- policy—Trace policy processing.
- query—Trace MLD membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/mpls/label-switched-path/oam/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <oam>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- database—Trace database activity.
- network—Trace network activity.
- pipe—Trace pipe activity.
- rpc-packet-details—Trace RPC packet details.
- traceroute—Trace traceroute activity.

**<flag> (configuration/protocols/mpls/label-switched-path/
primary/oam/traceoptions)**

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <oam>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Tracing parameters.

- Contents** <name>—No documentation is available yet.
- all—Trace everything.
 - configuration—Trace configuration events.
 - database—Trace database activity.
 - network—Trace network activity.
 - pipe—Trace pipe activity.
 - rpc-packet-details—Trace RPC packet details.
 - traceroute—Trace traceroute activity.

<flag> (configuration/protocols/mpls/label-switched-path/secondary/oam/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <oam>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- database—Trace database activity.
- network—Trace network activity.
- pipe—Trace pipe activity.
- rpc-packet-details—Trace RPC packet details.
- traceroute—Trace traceroute activity.

<flag> (configuration/protocols/mpls/label-switched-path/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- cspf—Trace CSPF computation.
- cspf-link—Trace links visited during CSPF.
- cspf-node—Trace nodes visited during CSPF.
- state—Trace state transitions.

<flag> (configuration/protocols/mpls/oam/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <oam>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </oam>
 </mpls>
 </protocols>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- database—Trace database activity.
- network—Trace network activity.
- pipe—Trace pipe activity.
- rpc-packet-details—Trace RPC packet details.
- traceroute—Trace traceroute activity.

<flag> (configuration/protocols/mpls/traceoptions)

Usage <configuration>
 <protocols>
 <mpls>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </mpls>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- connection—Trace CCC activity.
- connection-detail—Trace CCC activity in detail.
- cspf—Trace CSPF computation.
- cspf-link—Trace links visited during CSPF.
- cspf-node—Trace nodes visited during CSPF.
- error—Trace error conditions.
- graceful-restart—Trace graceful-restart-related events.
- lsping—Trace LSP ping packets received.
- state—Trace state transitions.

<flag> (configuration/protocols/msdp/group/peer/traceoptions)

Usage

```

<configuration>
  <protocols>
    <msdp>
      <group>
        <peer>
          <traceoptions>
            <flag>
              <name>name</name>    <!-- identifier -->
              <send/>
              <receive/>
              <detail/>
              <disable/>
            </flag>
          </traceoptions>
        </peer>
      </group>
    </msdp>
  </protocols>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/msdp/group/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </group>
 </msdp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
 - general—Trace general events.
 - keepalive—Trace keepalive messages.
 - normal—Trace normal events.
 - packets—Trace all MSDP packets.
 - policy—Trace policy processing.
 - route—Trace routing information.
 - source-active—Trace source-active messages.
 - source-active-request—Trace source-active request messages.
 - source-active-response—Trace source-active response messages.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
 - general—Trace general events.
 - keepalive—Trace keepalive messages.
 - normal—Trace normal events.
 - packets—Trace all MSDP packets.
 - policy—Trace policy processing.
 - route—Trace routing information.
 - source-active—Trace source-active messages.
 - source-active-request—Trace source-active request messages.
 - source-active-response—Trace source-active response messages.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/msdp/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </msdp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/mstp/traceoptions)

Usage	<pre> <configuration> <protocols> <mstp> <traceoptions> <flag> <name>name</name> <!-- identifier --> <disable/> </flag> </traceoptions> </mstp> </protocols> </configuration> </pre>
Description	Tracing parameters.
Contents	<p><disable>—Disable this trace flag.</p> <p><name>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ all—Trace all. ■ all-failures—Trace all failure conditions. ■ bpdu—Trace BPDU reception and transmission. ■ bridge-detection-state-machine—Trace Bridge detection state machine. ■ events—Trace events to the protocol state machine. ■ port-information-state-machine—Trace port information state machine. ■ port-migration-state-machine—Trace port migration state machine. ■ port-receive-state-machine—Trace port receive state machine. ■ port-role-select-state-machine—Trace port role selection state machine. ■ port-role-transit-state-machine—Trace port role transit state machine. ■ port-state-transit-state-machine—Trace port state transit state machine. ■ port-transmit-state-machine—Trace port transmit state machine. ■ ppmmd—Trace state and events for ppmmd process. ■ state-machine-variables—Trace when state machine variables change. ■ timers—Trace protocol timers. ■ topology-change-state-machine—Trace topology change state machine.

<flag> (configuration/protocols/neighbor-discovery/secure/traceoptions)

Usage <configuration>
 <protocols>
 <neighbor-discovery>
 <secure>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </secure>
 </neighbor-discovery>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- cryptographic-address—Trace Cryptographically Generated Address events.
- protocol—Trace protocol processing events.
- rsa—Trace RSA events.

<flag> (configuration/protocols/oam/ethernet/connectivity-fault-management/traceoptions)

Usage <configuration>
 <protocols>
 <oam>
 <ethernet>
 <connectivity-fault-management>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </connectivity-fault-management>
 </ethernet>
 </oam>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- error—Trace events related to catastrophic errors in daemon.
- init—Trace events related to protocol daemon start-up.
- protocol—Trace protocol processing events.
- routing-socket—Trace routing socket events.

<flag> (configuration/protocols/oam/ethernet/link-fault-management/traceoptions)

Usage <configuration>
 <protocols>
 <oam>
 <ethernet>
 <link-fault-management>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </link-fault-management>
 </ethernet>
 </oam>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- action-profile—Trace action profile invocation events.
- all—Trace everything.
- configuration—Trace configuration events.
- protocol—Trace protocol processing events.
- routing-socket—Trace routing socket events.

<flag> (configuration/protocols/ospf/traceoptions)

Usage <configuration>
 <protocols>
 <ospf>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ospf>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- on-demand—Trace demand circuit extensions.

- `packet-dump`—Dump the contents of selected packet types.
 - `packets`—Trace all OSPF packets.
 - `policy`—Trace policy processing.
 - `route`—Trace routing information.
 - `spf`—Trace SPF calculations.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/protocols/ospf3/realm/traceoptions)

Usage <configuration>
 <protocols>
 <ospf3>
 <realm>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </realm>
 </ospf3>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.

- `on-demand`—Trace demand circuit extensions.
 - `packet-dump`—Dump the contents of selected packet types.
 - `packets`—Trace all OSPF packets.
 - `policy`—Trace policy processing.
 - `route`—Trace routing information.
 - `spf`—Trace SPF calculations.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/protocols/ospf3/traceoptions)

Usage <configuration>
 <protocols>
 <ospf3>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ospf3>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- on-demand—Trace demand circuit extensions.

- `packet-dump`—Dump the contents of selected packet types.
- `packets`—Trace all OSPF packets.
- `policy`—Trace policy processing.
- `route`—Trace routing information.
- `spf`—Trace SPF calculations.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/protocols/pgm/traceoptions)

Usage <configuration>
 <protocols>
 <pgm>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </pgm>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- init—Trace initialization events.
- packets—Trace packet processing.
- parse—Trace parser processing.
- route-socket—Trace route-socket events.
- show—Trace show command servicing.
- state—Trace state transitions.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/pim/traceoptions)

Usage <configuration>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </pim>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- assert—Trace assert messages.
- autorp—Trace bootstrap/RP/auto-RP messages.
- bootstrap—Trace bootstrap/RP/auto-RP messages.
- general—Trace general events.
- graft—Trace join/prune/graft/graft-ack messages.
- hello—Trace hello packets.
- join—Trace join/prune/graft/graft-ack messages.
- mdt—Trace messages related to multicast data tunnels.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all PIM packets.
- policy—Trace policy processing.

- **prune**—Trace join/prune/graft/graft-ack messages.
 - **register**—Trace register/register-stop messages.
 - **route**—Trace routing information.
 - **rp**—Trace bootstrap/RP/auto-RP messages.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/protocols/ppp/traceoptions)

Usage <configuration>
 <protocols>
 <ppp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </ppp>
 </protocols>
 </configuration>

Description Area of PPP process to enable debugging output.

Contents <name>—No documentation is available yet.

- access—Trace access code.
- address-pool—Trace address pool code.
- all—Trace all areas of code.
- auth—Trace authentication code.
- chap—Trace CHAP code.
- ci—Trace ci code.
- config—Trace configuration code.
- ifdb—Trace interface database code.
- lcp—Trace LCP state machine code.
- memory—Trace memory management code.
- message—Trace message processing code.
- mlppp—Trace MLPPP code.
- ncp—Trace NCP state machine code.
- pap—Trace PAP code.
- ppp—Trace PPP protocol processing code.
- radius—Trace RADIUS processing code.
- redundancy—Trace redundancy code.
- rtsock—Trace routing socket code.
- session—Trace session management code.

- `signal`—Trace signal handling code.
- `timer`—Trace timer code.
- `ui`—Trace user interface code.

<flag> (configuration/protocols/rip/traceoptions)

Usage <configuration>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- auth—Trace RIP authentication.
- error—Trace RIP errors.
- expiration—Trace RIP route expiration processing.
- general—Trace general events.
- holddown—Trace RIP hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIP packets.
- policy—Trace policy processing.
- request—Trace RIP information packets.
- route—Trace routing information.
- state—Trace state transitions.

- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.
- **trigger**—Trace RIP triggered updates.
- **update**—Trace RIP update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/ripng/traceoptions)

Usage <configuration>
 <protocols>
 <ripng>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ripng>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace RIPng errors.
- expiration—Trace RIPng route expiration processing.
- general—Trace general events.
- holddown—Trace RIPng hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIPng packets.
- policy—Trace policy processing.
- request—Trace RIPng information packets.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- trigger—Trace RIPng triggered updates.

- `update`—Trace RIPv4 update packets.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

`<flag>` (configuration/protocols/router-advertisement/traceoptions)

Usage `<configuration>`
 `<protocols>`
 `<router-advertisement>`
 `<traceoptions>`
 `<flag>`
 `<name>name</name>` `<!-- identifier -->`
 `</flag>`
 `</traceoptions>`
 `</router-advertisement>`
 `</protocols>`
`</configuration>`

Description Tracing parameters.

Contents `<name>`—No documentation is available yet.

- `all`—Trace everything.
- `general`—Trace general events.
- `normal`—Trace normal events.
- `policy`—Trace policy processing.
- `route`—Trace routing information.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

<flag> (configuration/protocols/router-discovery/traceoptions)

Usage <configuration>
 <protocols>
 <router-discovery>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </router-discovery>
 </protocols>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/protocols/rstp/traceoptions)

Usage <configuration>
 <protocols>
 <rstp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </rstp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdud—Trace BPDUD reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.
- state-machine-variables—Trace when state machine variables change.
- timers—Trace protocol timers.
- topology-change-state-machine—Trace topology change state machine.

<flag> (configuration/protocols/rsvp/traceoptions)

Usage <configuration>
 <protocols>
 <rsvp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </rsvp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace error conditions.
- event—Trace RSVP related events.
- Imp—Trace RSVP-LMP related interactions.
- packets—Trace all RSVP packets.
- path—Trace RSVP path messages.
- pathtear—Trace RSVP PathTear messages.
- resv—Trace RSVP Resv messages.
- resvtear—Trace RSVP ResvTear messages.
- route—Trace routing information.
- state—Trace state transitions.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/vrrp/traceoptions)

Usage <configuration>
 <protocols>
 <vrrp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </vrrp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace all events.
- database—Trace database.
- general—Trace general events.
- interfaces—Trace interface messages.
- normal—Trace normal events.
- packets—Trace packets.
- state—Trace state transitions.
- timer—Trace timer events.

<flag> (configuration/protocols/vstp/vlan/traceoptions)

Usage <configuration>
 <protocols>
 <vstp>
 <vlan>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </vlan>
 </vstp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdv—Trace BPDV reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppd—Trace state and events for pppd process.
- state-machine-variables—Trace when state machine variables change.
- timers—Trace protocol timers.
- topology-change-state-machine—Trace topology change state machine.

<flag> (configuration/routing-instances/instance/access/address-assignment/pool/family/inet/dhcp-attributes/option/array)

Usage <configuration>
 <routing-instances>
 <instance>
 <access>
 <address-assignment>
 <pool>
 <family>
 <inet>
 <dhcp-attributes>
 <option>
 <array>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </array>
 </option>
 </dhcp-attributes>
 </inet>
 </family>
 </pool>
 </address-assignment>
 </access>
 </instance>
 </routing-instances>
 </configuration>

Description Array of boolean flag values.

Contents <name>—Array of boolean flag values.

- false—False value.
- off—Off value.
- on—On value.
- true—True value.

<flag> (configuration/routing-instances/instance/bridge-domains/ domain/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.

- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/routing-instances/instance/bridge-domains/domain/multicast-snooping-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

- Contents** <disable>—Disable this trace flag.
- <name>—No documentation is available yet.
- all—Trace everything.
 - config-internal—Trace configuration internals.
 - general—Trace general events.
 - normal—Trace normal events.
 - parse—Trace configuration parsing.
 - policy—Trace policy processing.
 - route—Trace routing information.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.

<flag> (configuration/routing-instances/instance/bridge-domains/domain/protocols/igmp-snooping/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <bridge-domains>
        <domain>
          <protocols>
            <igmp-snooping>
              <traceoptions>
                <flag>
                  <name>name</name>    <!-- identifier -->
                  <send/>
                  <receive/>
                  <detail/>
                  <disable/>
                </flag>
              </traceoptions>
            </igmp-snooping>
          </protocols>
        </domain>
      </bridge-domains>
    </instance>
  </routing-instances>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.

- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/forwarding-options/dhcp-relay/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <dhcp-relay>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-relay>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/routing-instances/instance/forwarding-options/helpers/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <helpers>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </helpers>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Area of UDP forwarding helper process on which to enable debugging output.

Contents <name>—No documentation is available yet.

- address—Trace address management code.
- all—Trace all areas of code.
- bootp—Trace BOOTP/DHCP service-specific code.
- config—Trace configuration code.
- domain—Trace DNS service-specific code.
- ifdb—Trace interface database code.
- io—Trace I/O code.
- main—Trace main loop code.
- port—Trace arbitrary protocol code.
- rtsock—Trace routing socket code.
- tftp—Trace TFTP service-specific code.
- trace—Trace tracing code.
- ui—Trace user interface code.
- util—Trace miscellaneous utility code.

<flag> (configuration/routing-instances/instance/multicast-snooping-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <multicast-snooping-options>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast-snooping-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <traceoptions>
                <flag>
                  <name>name</name>    <!-- identifier -->
                  <send/>
                  <receive/>
                  <detail/>
                  <disable/>
                  <filter>...</filter>
                </flag>
              </traceoptions>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.

- **open**—Trace BGP open packets.
 - **packets**—Trace all BGP protocol packets.
 - **policy**—Trace policy processing.
 - **refresh**—Trace BGP refresh packets.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **update**—Trace BGP update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.

- `packets`—Trace all BGP protocol packets.
- `policy`—Trace policy processing.
- `refresh`—Trace BGP refresh packets.
- `route`—Trace routing information.
- `state`—Trace state transitions.
- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.
- `update`—Trace BGP update packets.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/bgp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- 4byte-as—Trace 4 byte AS events.
- all—Trace everything.
- bfd—Trace BFD events.
- damping—Trace BGP damping information.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- keepalive—Trace BGP keepalive packets.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.

- **policy**—Trace policy processing.
 - **refresh**—Trace BGP refresh packets.
 - **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **update**—Trace BGP update packets.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/esis/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <esis>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </esis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errored packets.
- esh—Trace end system hello packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- ish—Trace intermediate system hello packets.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/igmp-snooping/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <igmp-snooping>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp-snooping>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- normal—Trace normal events.
- packets—Trace all IGMP packets.
- policy—Trace policy processing.
- query—Trace IGMP membership query messages.
- report—Trace membership report messages.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/isis/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- csn—Trace complete sequence number (CSN) packets.
- error—Trace errored packets.
- general—Trace general events.
- graceful-restart—Trace graceful restart events.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between IS-IS and LDP.
- lsp—Trace link-state packets.
- lsp-generation—Trace LSP generation.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace IS-IS packets.

- `policy`—Trace policy processing.
 - `psn`—Trace partial sequence number (PSN) packets.
 - `route`—Trace routing information.
 - `spf`—Trace SPF events.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/l2vpn/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- automatic-site—Trace VPLS automatic site state.
- connections—Trace Layer 2 VPN and VPLS connections.
- error—Trace errors.
- general—Trace general events.
- nlri—Trace Layer 2 VPN and VPLS remote site advertisements.
- normal—Trace normal events.
- oam—Trace LDP VPLS pseudowire OAM messages.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.
- **topology**—Trace Layer 2 VPN and VPLS topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/ldp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- address—Trace address packets.
- all—Trace everything.
- binding—Trace label binding state.
- error—Trace errored packets.
- event—Trace LDP state machine events.
- general—Trace general events.
- initialization—Trace initialization packets.
- label—Trace label packets.
- normal—Trace normal events.
- notification—Trace notification packets.
- nsr-synchronization—Trace NSR synchronization events.

- `packets`—Trace all LDP packets.
 - `path`—Trace label path state.
 - `periodic`—Trace periodic (hello and keepalive) packets.
 - `policy`—Trace policy processing.
 - `ppmd`—Trace state and events for ppm process.
 - `route`—Trace routing information.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.

- **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/msdp/group/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <group>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </group>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.

- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.

- `task`—Trace routing protocol task processing.
- `timer`—Trace routing protocol timer processing.

`<receive>`—Trace received packets.

`<send>`—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/msdp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <msdp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </msdp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/mstp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <mstp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </mstp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.
- state-machine-variables—Trace when state machine variables change.
- timers—Trace protocol timers.

- `topology-change-state-machine`—Trace topology change state machine.

<flag> (configuration/routing-instances/instance/protocols/mvpn/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <mvpn>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </mvpn>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace errors.
- general—Trace general events.
- nlri—Trace MVPN advertisements.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- topology—Trace MVPN topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/ospf/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.

- **normal**—Trace normal events.
 - **nsr-synchronization**—Trace NSR synchronization events.
 - **on-demand**—Trace demand circuit extensions.
 - **packet-dump**—Dump the contents of selected packet types.
 - **packets**—Trace all OSPF packets.
 - **policy**—Trace policy processing.
 - **route**—Trace routing information.
 - **spf**—Trace SPF calculations.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/ospf3/realms/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf3>
 <realm>
 <traceoptions>
<flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
</flag>
 </traceoptions>
 </realm>
 </ospf3>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.

- `lsa-update`—Trace LSA update packets.
 - `normal`—Trace normal events.
 - `nsr-synchronization`—Trace NSR synchronization events.
 - `on-demand`—Trace demand circuit extensions.
 - `packet-dump`—Dump the contents of selected packet types.
 - `packets`—Trace all OSPF packets.
 - `policy`—Trace policy processing.
 - `route`—Trace routing information.
 - `spf`—Trace SPF calculations.
 - `state`—Trace state transitions.
 - `task`—Trace routing protocol task processing.
 - `timer`—Trace routing protocol timer processing.
- `<receive>`—Trace received packets.
- `<send>`—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/ospf3/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf3>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ospf3>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- graceful-restart—Trace graceful restart.
- hello—Trace hello packets.
- ldp-synchronization—Trace synchronization between OSPF and LDP.
- lsa-ack—Trace LSA acknowledgment packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.

- **normal**—Trace normal events.
 - **nsr-synchronization**—Trace NSR synchronization events.
 - **on-demand**—Trace demand circuit extensions.
 - **packet-dump**—Dump the contents of selected packet types.
 - **packets**—Trace all OSPF packets.
 - **policy**—Trace policy processing.
 - **route**—Trace routing information.
 - **spf**—Trace SPF calculations.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/pim/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <filter>—Filter to apply to this flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- assert—Trace assert messages.
- autorp—Trace bootstrap/RP/auto-RP messages.
- bootstrap—Trace bootstrap/RP/auto-RP messages.
- general—Trace general events.
- graft—Trace join/prune/graft/graft-ack messages.
- hello—Trace hello packets.
- join—Trace join/prune/graft/graft-ack messages.
- mdt—Trace messages related to multicast data tunnels.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.

- **packets**—Trace all PIM packets.
- **policy**—Trace policy processing.
- **prune**—Trace join/prune/graft/graft-ack messages.
- **register**—Trace register/register-stop messages.
- **route**—Trace routing information.
- **rp**—Trace bootstrap/RP/auto-RP messages.
- **state**—Trace state transitions.
- **task**—Trace routing protocol task processing.
- **timer**—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/rip/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <filter>—Filter to apply to this flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- auth—Trace RIP authentication.
- error—Trace RIP errors.
- expiration—Trace RIP route expiration processing.
- general—Trace general events.
- holddown—Trace RIP hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIP packets.
- policy—Trace policy processing.
- request—Trace RIP information packets.

- **route**—Trace routing information.
 - **state**—Trace state transitions.
 - **task**—Trace routing protocol task processing.
 - **timer**—Trace routing protocol timer processing.
 - **trigger**—Trace RIP triggered updates.
 - **update**—Trace RIP update packets.
- <receive>**—Trace received packets.
- <send>**—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/ripng/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ripng>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ripng>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- error—Trace RIPng errors.
- expiration—Trace RIPng route expiration processing.
- general—Trace general events.
- holddown—Trace RIPng hold-down processing.
- normal—Trace normal events.
- nsr-synchronization—Trace NSR synchronization events.
- packets—Trace all RIPng packets.
- policy—Trace policy processing.
- request—Trace RIPng information packets.
- route—Trace routing information.
- state—Trace state transitions.

- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- trigger—Trace RIPng triggered updates.
- update—Trace RIPng update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/router-discovery/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <router-discovery>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </router-discovery>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/routing-instances/instance/protocols/rstp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rstp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </rstp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.

- `state-machine-variables`—Trace when state machine variables change.
- `timers`—Trace protocol timers.
- `topology-change-state-machine`—Trace topology change state machine.

<flag> (configuration/routing-instances/instance/protocols/vpls/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <vpls>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </vpls>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- automatic-site—Trace VPLS automatic site state.
- connections—Trace Layer 2 VPN and VPLS connections.
- error—Trace errors.
- general—Trace general events.
- nlri—Trace Layer 2 VPN and VPLS remote site advertisements.
- normal—Trace normal events.
- oam—Trace LDP VPLS pseudowire OAM messages.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- **timer**—Trace routing protocol timer processing.
- **topology**—Trace Layer 2 VPN and VPLS topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/vstp/vlan/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <vstp>
 <vlan>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </vlan>
 </vstp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace all.
- all-failures—Trace all failure conditions.
- bpdu—Trace BPDU reception and transmission.
- bridge-detection-state-machine—Trace Bridge detection state machine.
- events—Trace events to the protocol state machine.
- port-information-state-machine—Trace port information state machine.
- port-migration-state-machine—Trace port migration state machine.
- port-receive-state-machine—Trace port receive state machine.
- port-role-select-state-machine—Trace port role selection state machine.
- port-role-transit-state-machine—Trace port role transit state machine.
- port-state-transit-state-machine—Trace port state transit state machine.
- port-transmit-state-machine—Trace port transmit state machine.
- pppmd—Trace state and events for pppmd process.

- `state-machine-variables`—Trace when state machine variables change.
- `timers`—Trace protocol timers.
- `topology-change-state-machine`—Trace topology change state machine.

<flag> (configuration/routing-instances/instance/routing-options/auto-export/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- export—Export processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/routing-options/dynamic-tunnels/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <dynamic-tunnels>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </dynamic-tunnels>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- kernel—Trace kernel communication.
- task—Trace task or job processing.
- tunnel—Trace tunnel addition, change, or deletion.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/routing-options/flow/validation/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <flow>
 <validation>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </validation>
 </flow>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to tracing.

<name>—No documentation is available yet.

- all—Trace everything.
- flash—Trace flash processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- resolution—Trace flow to unicast route resolution.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.

- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/routing-options/multicast/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <multicast>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.
 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/routing-instances/instance/routing-options/resolution/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <resolution>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </resolution>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- event—Event processing.
- flash—Flash processing.
- indirect—Indirect next-hop addition, change, or deletion.
- kernel—Kernel communication.
- task—Task or job processing.

 <receive>—Trace received packets.

 <send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/routing-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- condition-manager—Trace condition manager events.
- config-internal—Trace configuration internals.
- general—Trace general events.
- graceful-restart—Trace Graceful Restart events.
- normal—Trace normal events.
- nsr-synchronization—Trace nonstop routing synchronization events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- regex-parse—Trace regular-expression parsing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/routing-instances/instance/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </instance>
 </routing-instances>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.

- ui—User Interface operations.

<flag> (configuration/routing-options/auto-export/traceoptions)

Usage <configuration>
 <routing-options>
 <auto-export>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </auto-export>
 </routing-options>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- export—Export processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-options/dynamic-tunnels/traceoptions)

Usage	<pre> <configuration> <routing-options> <dynamic-tunnels> <traceoptions> <flag> <name>name</name> <!-- identifier --> <send/> <receive/> <detail/> <disable/> </flag> </traceoptions> </dynamic-tunnels> </routing-options> </configuration> </pre>
Description	Tracing parameters.
Contents	<p><detail>—Trace detailed information.</p> <p><disable>—Disable this trace flag.</p> <p><name>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ all—Trace everything. ■ kernel—Trace kernel communication. ■ task—Trace task or job processing. ■ tunnel—Trace tunnel addition, change, or deletion. <p><receive>—Trace received packets.</p> <p><send>—Trace transmitted packets.</p>

<flag> (configuration/routing-options/flow/validation/traceoptions)

Usage

```

<configuration>
  <routing-options>
    <flow>
      <validation>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <send/>
            <receive/>
            <detail/>
            <disable/>
            <filter>...</filter>
          </flag>
        </traceoptions>
      </validation>
    </flow>
  </routing-options>
</configuration>

```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to tracing.

<name>—No documentation is available yet.

- all—Trace everything.
- flash—Trace flash processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- resolution—Trace flow to unicast route resolution.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-options/multicast/traceoptions)

Usage <configuration>
 <routing-options>
 <multicast>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </multicast>
 </routing-options>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.
 <name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/routing-options/resolution/traceoptions)

Usage <configuration>
 <routing-options>
 <resolution>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </resolution>
 </routing-options>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- event—Event processing.
- flash—Flash processing.
- indirect—Indirect next-hop addition, change, or deletion.
- kernel—Kernel communication.
- task—Task or job processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-options/traceoptions)

Usage	<pre> <configuration> <routing-options> <traceoptions> <flag> <name>name</name> <!-- identifier --> <disable/> </flag> </traceoptions> </routing-options> </configuration> </pre>
Description	Tracing parameters.
Contents	<p><disable>—Disable this trace flag.</p> <p><name>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ all—Trace everything. ■ condition-manager—Trace condition manager events. ■ config-internal—Trace configuration internals. ■ general—Trace general events. ■ graceful-restart—Trace Graceful Restart events. ■ normal—Trace normal events. ■ nsr-synchronization—Trace nonstop routing synchronization events. ■ parse—Trace configuration parsing. ■ policy—Trace policy processing. ■ regex-parse—Trace regular-expression parsing. ■ route—Trace routing information. ■ state—Trace state transitions. ■ task—Trace routing protocol task processing. ■ timer—Trace routing protocol timer processing.

<flag> (configuration/security/pki/traceoptions)

Usage <configuration>
 <security>
 <pki>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </pki>
 </security>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- enrollment—PKI certificate enrollment tracing.

<flag> (configuration/security/traceoptions)

Usage <configuration>
 <security>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </security>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- certificates—Trace certificate events.
- database—Trace security associations database events.
- general—Trace general events.
- ike—Trace IKE module processing.
- parse—Trace configuration processing.
- policy-manager—Trace policy manager processing.
- routing-socket—Trace routing socket messages.
- snmp—Trace SNMP operations.
- timer—Trace internal timer events.

<flag> (configuration/services/adaptive-services-pics/traceoptions)

Usage <configuration>
 <services>
 <adaptive-services-pics>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </adaptive-services-pics>
 </services>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- kernel-object—Trace kernel object management.
- routing-protocol—Trace routing protocol events.
- routing-socket—Trace routing socket events.
- snmp—Trace SNMP operations.

<flag> (configuration/services/ggsn/charging/charging-log/traceoptions)

Usage	<pre><configuration> <services> <ggsn> <charging> <charging-log> <traceoptions> <flag> <name>name</name> <!-- identifier --> </flag> </traceoptions> </charging-log> </charging> </ggsn> </services> </configuration></pre>
Description	Tracing parameters.
Contents	<p><name>—No documentation is available yet.</p> <ul style="list-style-type: none">■ all—Trace everything.■ charging—Trace charging-specific events.■ connections—Trace connection-specific events.■ init—Trace initialization events.

<flag> (configuration/services/ipsec-vpn/traceoptions)

Usage <configuration>
 <services>
 <ipsec-vpn>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </ipsec-vpn>
 </services>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- certificates—Trace certificate events.
- database—Trace security associations database events.
- general—Trace general events.
- ike—Trace IKE module processing.
- parse—Trace configuration processing.
- policy-manager—Trace policy manager processing.
- routing-socket—Trace routing socket messages.
- snmp—Trace SNMP operations.
- timer—Trace internal timer events.

<flag> (configuration/services/l2tp/traceoptions)

Usage <configuration>
 <services>
 <l2tp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </l2tp>
 </services>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- protocol—Trace Layer 2 Tunneling Protocol events.
- routing-socket—Trace routing socket events.
- rpd—Trace interactions with rpd.

<flag> (configuration/services/l2tp/traceoptions/interfaces)

Usage <configuration>
 <services>
 <l2tp>
 <traceoptions>
 <interfaces>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </interfaces>
 </traceoptions>
 </l2tp>
 </services>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- ipc—Trace L2TP IPC messages between PIC and Routing Engine.
- packet-dump—Dump each packet content based on debug level.
- protocol—Trace L2TP, PPP, and multilink handling.
- system—Trace packet processing on the PIC.

<flag> (configuration/services/logging/traceoptions)

Usage <configuration>
 <services>
 <logging>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </logging>
 </services>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- connections—Trace connection-specific events.
- flow-collector—Trace flow collector specific events.
- init—Trace initialization events.

<flag> (configuration/services/mobile-ip/traceoptions)

Usage <configuration>
 <services>
 <mobile-ip>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </mobile-ip>
 </services>
 </configuration>

Description Area of MIP server process to enable debugging output.

Contents <name>—No documentation is available yet.

- all—Trace all areas of code.
- authentication—Trace authentication code.
- binding—Trace binding code.
- configuration—Trace configuration code.
- event—Trace event code.
- foreign-agent—Trace foreign agent code.
- home-agent—Trace home agent code.
- interface-database—Trace interface database code.
- link-control—Trace link control code.
- packet—Trace packet code.
- protocol—Trace protocol code.
- route—Trace route code.
- rtsock—Trace routing socket code.
- session-db—Trace session management code.
- signal—Trace signal code.
- socket-control—Trace socket control code.
- subscriber—Trace subscriber code.
- trace—Trace tracing code.
- tunnel—Trace tunnelling code.

- user-interface—Trace user interface code.

<flag> (configuration/services/pgcp/traceoptions)

Usage <configuration>
 <services>
 <pgcp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </pgcp>
 </services>
 </configuration>

Description Type of packet gateway service events to include in trace.

Contents <name>—No documentation is available yet.

- all—All events.
- configuration—Configuration events.
- debug—Debug events.
- error—Error events.
- firewall—Firewall events.
- gate—Gate requests and replies events.
- media-function—Media function events.
- pgc-connection—PGC connection events.
- pgcp-stack-debug—PGCP stack debug events.
- pgcp-stack-h248—PGCP stack h.248 messages.
- pgcp-stack-trace—PGCP stack function calls.
- routing-socket—Routing socket events.
- trace—Daemon function calls.

<flag> (configuration/snmp/traceoptions)

Usage <configuration>
 <snmp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </snmp>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- interface-stats—Trace interface statistics (logical and physical).
- nonvolatile-sets—Nonvolatile SNMP set request handling.
- pdu—Dump SNMP request/response packets.
- protocol-timeouts—Trace SNMP request timeouts.
- routing-socket—Trace routing socket calls.
- subagent—Trace subagent restarts.
- timer—Trace internal timer events.
- varbind-error—Trace varbind errors.

<flag> (configuration/system/accounting/traceoptions)

- Usage** `<configuration>
 <system>
 <accounting>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </accounting>
 </system>
</configuration>`
- Description** Tracing parameters.
- Contents** <name>—No documentation is available yet.
- all—Trace all operations.
 - config—Trace configuration processing.
 - events—Trace accounting events and their processing.
 - radius—Trace RADIUS processing.

<flag> (configuration/system/license/traceoptions)

- Usage** `<configuration>
 <system>
 <license>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </license>
 </system>
</configuration>`
- Description** Tracing parameters.
- Contents** <name>—No documentation is available yet.
- all—Trace all operations.
 - config—Trace license configuration processing.
 - events—Trace licensing events and their processing.

<flag> (configuration/system/processes/diameter-service/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <diameter-service>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </diameter-service>
 </processes>
 </system>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- application—Trace Diameter applications.
- configuration—Trace configuration events.
- connection—Trace Diameter transport.
- framework—Trace Diameter framework.
- message—Trace Diameter messages.
- peer—Trace Diameter peer events.
- session—Trace Diameter sessions.

<flag> (configuration/system/processes/ general-authentication-service/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <general-authentication-service>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </general-authentication-service>
 </processes>
 </system>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- address-assignment—Trace address-assignment events.
- all—Trace everything.
- configuration—Trace configuration events.
- framework—Trace authentication framework events.
- ldap—Trace ldap authentication events.
- local-authentication—Trace local authentication events.
- radius—Trace radius authentication events.

<flag> (configuration/system/processes/mac-validation/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <mac-validation>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </mac-validation>
 </processes>
 </system>
 </configuration>

Description Area of process mac validation to enable debugging output.

Contents <name>—No documentation is available yet.

- all—Trace all areas of code.
- database—Trace mac validation database operations.
- firewall—Trace firewall (DFWD) operations.
- general—Trace miscellaneous operations.
- rtsock—Trace routing socket operations.

<flag> (configuration/system/processes/process-monitor/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <process-monitor>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </process-monitor>
 </processes>
 </system>
 </configuration>

Description Area of process health monitor to enable debugging output.

Contents <name>—No documentation is available yet.

- all—Trace all areas of code.
- events—Trace event code.
- heartbeat—Trace heartbeat code.
- process-tracking—Trace process tracking code.
- ui—Trace user interface code.

<flag> (configuration/system/processes/resource-cleanup/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <resource-cleanup>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </resource-cleanup>
 </processes>
 </system>
 </configuration>

Description Area of resource cleanup process to enable debugging output.

Contents <name>—No documentation is available yet.

- all—Trace all areas of code.
- events—Trace event code.
- gencfg—Trace GENCFG blob cleanup code.
- module—Trace module code.
- sysvsem—Trace SYSV semaphore cleanup code.
- sysvshm—Trace SYSV shared memory cleanup code.
- tracking—Trace process tracking code.
- ui—Trace user interface code.

<flag> (configuration/system/processes/sbc-configuration-process/traceoptions)

Usage <configuration>
 <system>
 <processes>
 <sbc-configuration-process>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </sbc-configuration-process>
 </processes>
 </system>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.

<flag> (configuration/system/scripts/commit/traceoptions)

Usage <configuration>
 <system>
 <scripts>
 <commit>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </commit>
 </scripts>
 </system>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace all operations.
- events—Trace important events.
- input—Trace script input data.
- offline—Generate data for offline development.
- output—Trace script output data.
- rpc—Trace script RPCs.
- xslt—Trace the XSLT library.

<flag> (configuration/system/scripts/op/traceoptions)

Usage <configuration>
 <system>
 <scripts>
 <op>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </op>
 </scripts>
 </system>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace all operations.
- events—Trace important events.
- input—Trace script input data.
- offline—Generate data for offline development.
- output—Trace script output data.
- rpc—Trace script RPCs.
- xslt—Trace the XSLT library.

<flag> (configuration/system/services/database-replication/traceoptions)

Usage <configuration>
 <system>
 <services>
 <database-replication>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </database-replication>
 </services>
 </system>
 </configuration>

Description Database replication operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- database—Database operations.
- general—Miscellaneous operations.
- mirror—Mirror operations.
- replication—Database replication operations.
- session-db—Session database operations.
- ui—User Interface operations.

<flag> (configuration/system/services/dhcp/option/array)

Usage <configuration>
 <system>
 <services>
 <dhcp>
 <option>
 <array>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </array>
 </option>
 </dhcp>
 </services>
 </system>
 </configuration>

Description Array of boolean flag values.

Contents <name>—Array of boolean flag values.

- false—False value.
- off—Off value.
- on—On value.
- true—True value.

<flag> (configuration/system/services/dhcp/pool/option/array)

Usage <configuration>
 <system>
 <services>
 <dhcp>
 <pool>
 <option>
 <array>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </array>
 </option>
 </pool>
 </dhcp>
 </services>
 </system>
</configuration>

Description Array of boolean flag values.

Contents <name>—Array of boolean flag values.

- false—False value.
- off—Off value.
- on—On value.
- true—True value.

<flag> (configuration/system/services/dhcp/static-binding/option/array)

Usage <configuration>
 <system>
 <services>
 <dhcp>
 <static-binding>
 <option>
 <array>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </array>
 </option>
 </static-binding>
 </dhcp>
 </services>
 </system>
 </configuration>

Description Array of boolean flag values.

Contents <name>—Array of boolean flag values.

- false—False value.
- off—Off value.
- on—On value.
- true—True value.

<flag> (configuration/system/services/dhcp/traceoptions)

Usage <configuration>
 <system>
 <services>
 <dhcp>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp>
 </services>
 </system>
 </configuration>

Description Area of DHCP server process to enable debugging output.

Contents <name>—No documentation is available yet.

- all—Trace all areas of code.
- binding—Trace bindings code.
- config—Trace configuration code.
- conflict—Trace conflict detection code.
- event—Trace event code.
- ifdb—Trace interface database code.
- io—Trace I/O code.
- lease—Trace lease code.
- main—Trace main loop code.
- misc—Trace miscellaneous code.
- option—Trace option code.
- packet—Trace packet code.
- pool—Trace pool code.
- protocol—Trace protocol code.
- relay—Trace relay code.
- rtsock—Trace routing socket code.
- scope—Trace scope code.

- `signal`—Trace signal code.
- `trace`—Trace tracing code.
- `ui`—Trace user interface code.

<flag> (configuration/system/services/dhcp-local-server/traceoptions)

Usage <configuration>
 <system>
 <services>
 <dhcp-local-server>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </dhcp-local-server>
 </services>
 </system>
 </configuration>

Description DHCP relay operations to include in debugging trace.

Contents <name>—No documentation is available yet.

- all—All operations.
- auth—Authentication operations.
- database—Database operations.
- fwd—Firewall process operations.
- general—Miscellaneous operations.
- ha—High Availability-related operations.
- interface—Interface operations.
- io—I/O operations.
- packet—Packet-decoding operations.
- packet-option—DHCP option-decoding operations.
- profile—Profile operations.
- rpd—Routing Protocol process operations.
- rtsock—Routing socket operations.
- session-db—Session database operations.
- state—State-transition operations.
- ui—User Interface operations.

<flag> (configuration/system/services/outbound-ssh/traceoptions)

Usage <configuration>
 <system>
 <services>
 <outbound-ssh>
 <traceoptions>
 <flag>
 <name>*name*</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </outbound-ssh>
 </services>
 </system>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- configuration—Trace configuration events.
- connectivity—Trace TCP connection handling.

<flag> (configuration/system/services/service-deployment/traceoptions)

Usage	<pre> <configuration> <system> <services> <service-deployment> <traceoptions> <flag> <name>name</name> <!-- identifier --> </flag> </traceoptions> </service-deployment> </services> </system> </configuration> </pre>
Description	Tracing options.
Contents	<p><name>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ all—Trace everything. ■ application—Trace application events. ■ beep—Trace BEEP protocol events. ■ io—Trace I/O activities. ■ profile—Trace BEEP profile events.

<flood> (configuration/bridge-domains/domain/forwarding-options)

Usage	<pre> <configuration> <bridge-domains> <domain> <forwarding-options> <flood> <input>input</input> </flood> </forwarding-options> </domain> </bridge-domains> </configuration> </pre>
Description	Filtering for bridge flood table.
Contents	<input>—Name of input filter to apply for bridge flood packets.

<flood> (configuration/forwarding-options/family/vpls)

Usage <configuration>
 <forwarding-options>
 <family>
 <vpls>
 <flood>
 <input>*input*</input>
 </flood>
 </vpls>
 </family>
 </forwarding-options>
 </configuration>

Description Filtering for VPLS flood table.

Contents <input>—Name of input filter to apply for VPLS flood packets.

<flood> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/forwarding-options)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <flood>
 <input>*input*</input>
 </flood>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Filtering for bridge flood table.

Contents <input>—Name of input filter to apply for bridge flood packets.

<flood> (configuration/logical-systems/routing-instances/instance/forwarding-options/family/vpls)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <vpls>
 <flood>
 <input>*input*</input>
 </flood>
 </vpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Filtering for VPLS flood table.

Contents <input>—Name of input filter to apply for VPLS flood packets.

<flood> (configuration/routing-instances/instance/bridge-domains/domain/forwarding-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <flood>
 <input>*input*</input>
 </flood>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
</configuration>

Description Filtering for bridge flood table.

Contents <input>—Name of input filter to apply for bridge flood packets.

<flood> (configuration/routing-instances/instance/forwarding-options/family/vpls)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <family>
 <vpls>
 <flood>
 <input>*input*</input>
 </flood>
 </vpls>
 </family>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Filtering for VPLS flood table.

Contents <input>—Name of input filter to apply for VPLS flood packets.

<flood-groups> (configuration/bridge-domains/domain/multicast-snooping-options)

Usage <configuration>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <flood-groups>
 <name>*name*</name> <!-- identifier -->
 </flood-groups>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </configuration>

Description Groups for which the traffic will be flooded.

Contents <name>—Groups for which the traffic will be flooded.

<flood-groups> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/multicast-snooping-options)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <flood-groups>
 <name>*name*</name> <!-- identifier -->
 </flood-groups>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Groups for which the traffic will be flooded.

Contents <name>—Groups for which the traffic will be flooded.

<flood-groups> (configuration/logical-systems/routing-instances/instance/multicast-snooping-options)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <multicast-snooping-options>
 <flood-groups>
 <name>*name*</name> <!-- identifier -->
 </flood-groups>
 </multicast-snooping-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Groups for which the traffic will be flooded.

Contents <name>—Groups for which the traffic will be flooded.

<flood-groups> (configuration/multicast-snooping-options)

Usage	<pre> <configuration> <multicast-snooping-options> flood-groups <name>name</name> <!-- identifier --> </flood-groups> </multicast-snooping-options> </configuration> </pre>
Description	Groups for which the traffic will be flooded.
Contents	<name>—Groups for which the traffic will be flooded.

<flood-groups> (configuration/routing-instances/instance/bridge-domains/domain/multicast-snooping-options)

Usage	<pre> <configuration> <routing-instances> <instance> <bridge-domains> <domain> <multicast-snooping-options> flood-groups <name>name</name> <!-- identifier --> </flood-groups> </multicast-snooping-options> </domain> </bridge-domains> </instance> </routing-instances> </configuration> </pre>
Description	Groups for which the traffic will be flooded.
Contents	<name>—Groups for which the traffic will be flooded.

<flood-groups> (configuration/routing-instances/instance/multicast-snooping-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <multicast-snooping-options>
 <flood-groups>
 <name>name</name> <!-- identifier -->
 </flood-groups>
 </multicast-snooping-options>
 </instance>
 </routing-instances>
 </configuration>

Description Groups for which the traffic will be flooded.

Contents <name>—Groups for which the traffic will be flooded.

<flow> (configuration/logical-systems/protocols/bgp/family/inet)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </bgp>
 </protocols>
 </logical-systems>
</configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

<no-validate>—Bypass validation procedure for routes that match policy.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<flow> (configuration/logical-systems/protocols/bgp/family/inet-vpn)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
 <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

<flow> (configuration/logical-systems/protocols/bgp/group/family/inet)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <no-validate>—Bypass validation procedure for routes that match policy.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/logical-systems/protocols/bgp/group/family/inet-vpn)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/logical-systems/protocols/bgp/group/neighbor/family/inet)

Usage

```

<configuration>
  <logical-systems>
    <protocols>
      <bgp>
        <group>
          <neighbor>
            <family>
              <inet>
                <flow>
                  <prefix-limit>...</prefix-limit>
                  <accepted-prefix-limit>...</accepted-prefix-limit>
                  <rib-group>...</rib-group>
                  <no-validate>...</no-validate>
                </flow>
              </inet>
            </family>
          </neighbor>
        </group>
      </bgp>
    </protocols>
  </logical-systems>
</configuration>

```

Description Include flow NLRI.

Contents

- <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
- <no-validate>—Bypass validation procedure for routes that match policy.
- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<flow> (configuration/logical-systems/protocols/bgp/group/neighbor/family/inet-vpn)

Usage <configuration>
 <logical-systems>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </logical-systems>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/logical-systems/routing-instances/instance/protocols/bgp/family/inet)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <family>
              <inet>
                <flow>
                  <prefix-limit>...</prefix-limit>
                  <accepted-prefix-limit>...</accepted-prefix-limit>
                  <rib-group>...</rib-group>
                  <no-validate>...</no-validate>
                </flow>
              </inet>
            </family>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Include flow NLRI.

Contents

- <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
- <no-validate>—Bypass validation procedure for routes that match policy.
- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<flow> (configuration/logical-systems/routing-instances/instance/protocols/bgp/family/inet-vpn)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/family/inet)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <family>
                <inet>
                  <flow>
                    <prefix-limit>...</prefix-limit>
                    <accepted-prefix-limit>...</accepted-prefix-limit>
                    <rib-group>...</rib-group>
                    <no-validate>...</no-validate>
                  </flow>
                </inet>
              </family>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Include flow NLRI.

Contents

- <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
- <no-validate>—Bypass validation procedure for routes that match policy.
- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<flow> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/family/inet-vpn)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
 <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

<flow> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <bgp>
            <group>
              <neighbor>
                <family>
                  <inet>
                    <flow>
                      <prefix-limit>...</prefix-limit>
                      <accepted-prefix-limit>...</accepted-prefix-limit>
                      <rib-group>...</rib-group>
                      <no-validate>...</no-validate>
                    </flow>
                  </inet>
                </family>
              </neighbor>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Include flow NLRI.

Contents

- <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
- <no-validate>—Bypass validation procedure for routes that match policy.
- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<flow> (configuration/logical-systems/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
 <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

<flow> (configuration/logical-systems/routing-instances/instance/routing-options)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <routing-options> <flow> <validation>...</validation> <route>...</route> </flow> </routing-options> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	Locally defined flow routing information.
Contents	<p><route>—Flow route.</p> <p><validation>—Flow route validation options.</p>

<flow> (configuration/logical-systems/routing-instances/instance/routing-options/auto-export/family/inet)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <routing-options> <auto-export> <family> <inet> <flow> <disable/> <rib-group>rib-group</rib-group> </flow> </inet> </family> </auto-export> </routing-options> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	Flow routing information.
Contents	<p><disable>—Disable instance export.</p> <p><rib-group>—Auxiliary rib-group of additional RIBs to consider.</p>

<flow> (configuration/logical-systems/routing-instances/instance/routing-options/auto-export/family/inet6)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet6>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </inet6>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/logical-systems/routing-instances/instance/routing-options/auto-export/family/iso)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <iso>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </iso>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

<rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/logical-systems/routing-options)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <flow>
 <validation>...</validation>
 <route>...</route>
 </flow>
 </routing-options>
 </logical-systems>
 </configuration>

Description Locally defined flow routing information.

Contents <route>—Flow route.

<validation>—Flow route validation options.

<flow> (configuration/logical-systems/routing-options/auto-export/family/inet)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </inet>
 </family>
 </auto-export>
 </routing-options>
 </logical-systems>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/logical-systems/routing-options/auto-export/family/inet6)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <auto-export>
 <family>
 <inet6>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </inet6>
 </family>
 </auto-export>
 </routing-options>
 </logical-systems>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/logical-systems/routing-options/auto-export/family/iso)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <auto-export>
 <family>
 <iso>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </iso>
 </family>
 </auto-export>
 </routing-options>
 </logical-systems>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/protocols/bgp/family/inet)

Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </bgp>
 </protocols>
 </configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <no-validate>—Bypass validation procedure for routes that match policy.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/protocols/bgp/family/inet-vpn)

Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/protocols/bgp/group/family/inet)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

<no-validate>—Bypass validation procedure for routes that match policy.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<flow> (configuration/protocols/bgp/group/family/inet-vpn)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/protocols/bgp/group/neighbor/family/inet)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <no-validate>—Bypass validation procedure for routes that match policy.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/protocols/bgp/group/neighbor/family/inet-vpn)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/routing-instances/instance/protocols/bgp/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
 <no-validate>—Bypass validation procedure for routes that match policy.
 <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

<flow> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 </flow>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

 <no-validate>—Bypass validation procedure for routes that match policy.

 <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<flow> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <inet-vpn>
                <flow>
                  <prefix-limit>...</prefix-limit>
                  <accepted-prefix-limit>...</accepted-prefix-limit>
                  <rib-group>...</rib-group>
                </flow>
              </inet-vpn>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Include flow VPN NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<flow> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <flow>
 <prefix-limit>...</prefix-limit>
 <accepted-prefix-limit>...</accepted-prefix-limit>
 <rib-group>...</rib-group>
 <no-validate>...</no-validate>
 </flow>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include flow NLRI.

Contents <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
 <no-validate>—Bypass validation procedure for routes that match policy.
 <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

<flow> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet-vpn>
                  <flow>
                    <prefix-limit>...</prefix-limit>
                    <accepted-prefix-limit>...</accepted-prefix-limit>
                    <rib-group>...</rib-group>
                  </flow>
                </inet-vpn>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

Description Include flow VPN NLRI.

Contents

- <accepted-prefix-limit>—Limit maximum number of prefixes accepted from a peer.
- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<flow> (configuration/routing-instances/instance/routing-options)

Usage	<pre> <configuration> <routing-instances> <instance> <routing-options> <flow> <validation>...</validation> <route>...</route> </flow> </routing-options> </instance> </routing-instances> </configuration> </pre>
Description	Locally defined flow routing information.
Contents	<p><route>—Flow route.</p> <p><validation>—Flow route validation options.</p>

<flow> (configuration/routing-instances/instance/routing-options/auto-export/family/inet)

Usage	<pre> <configuration> <routing-instances> <instance> <routing-options> <auto-export> <family> <inet> <flow> <disable/> <rib-group>rib-group</rib-group> </flow> </inet> </family> </auto-export> </routing-options> </instance> </routing-instances> </configuration> </pre>
Description	Flow routing information.
Contents	<p><disable>—Disable instance export.</p> <p><rib-group>—Auxiliary rib-group of additional RIBs to consider.</p>

<flow> (configuration/routing-instances/instance/routing-options/auto-export/family/inet6)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet6>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </inet6>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/routing-instances/instance/routing-options/auto-export/family/iso)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <iso>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </iso>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

<rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <flow>
 <validation>...</validation>
 <route>...</route>
 </flow>
 </routing-options>
 </configuration>

Description Locally defined flow routing information.

Contents <route>—Flow route.

<validation>—Flow route validation options.

<flow> (configuration/routing-options/auto-export/family/inet)

Usage <configuration>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </inet>
 </family>
 </auto-export>
 </routing-options>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.
 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/routing-options/auto-export/family/inet6)

Usage <configuration>
 <routing-options>
 <auto-export>
 <family>
 <inet6>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </inet6>
 </family>
 </auto-export>
 </routing-options>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.
 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow> (configuration/routing-options/auto-export/family/iso)

Usage <configuration>
 <routing-options>
 <auto-export>
 <family>
 <iso>
 <flow>
 <disable/>
 <rib-group>*rib-group*</rib-group>
 </flow>
 </iso>
 </family>
 </auto-export>
 </routing-options>
 </configuration>

Description Flow routing information.

Contents <disable>—Disable instance export.

 <rib-group>—Auxiliary rib-group of additional RIBs to consider.

<flow-collector> (configuration/services)

Usage <configuration>
 <services>
 <flow-collector>
 <analyzer-address>*analyzer-address*</analyzer-address>
 <analyzer-id>*analyzer-id*</analyzer-id>
 <retry>*retry*</retry>
 <retry-delay>*seconds*</retry-delay>
 <destinations>...</destinations> <!-- mandatory -->
 <file-specification>...</file-specification> <!-- mandatory -->
 <interface-map>...</interface-map> <!-- mandatory -->
 <transfer-log-archive>...</transfer-log-archive>
 </flow-collector>
 </services>
 </configuration>

Description Configure options to control flow collector.

Contents <analyzer-address>—Analyzer IP address field override value.

<analyzer-id>—Analyzer ID field override value.

<destinations>—Configure destination for files.

<file-specification>—File format specification.

<interface-map>—Input interface to Collector PIC mapping.

<retry>—Transfer retry attempt count.

<retry-delay>—Delay between transfer retry attempts.

<transfer-log-archive>—Transfer log archive specification.

<flow-limits> (configuration/services/ggsn/service-identification)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <flow-limits>
 <max-user-child>*max-user-child*</max-user-child>
 <max-node-flow>*max-node-flow*</max-node-flow>
 <max-analyzer-routing>*max-analyzer-routing*</max-analyzer-routing>
 </flow-limits>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Settings for limitation of inspection flows.

Contents <max-analyzer-routing>—Maximum accepted dynamic routing rule per analyzer.
 <max-node-flow>—Maximum accepted flows in the node.
 <max-user-child>—Maximum allowed flows per protocol and user.

<flow-map> (configuration/logical-systems/routing-instances/instance/routing-options/multicast)

Usage

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <routing-options>
          <multicast>
            <flow-map>
              <name>name</name>    <!-- identifier -->
              <policy>...</policy>  <!-- mandatory -->
              <bandwidth>...</bandwidth>
              <redundant-sources>...</redundant-sources>
              <forwarding-cache>...</forwarding-cache>
            </flow-map>
          </multicast>
        </routing-options>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

Description Multicast flow map configuration.

Contents

- <bandwidth>—Bandwidth properties for matched flows.
- <forwarding-cache>—Forwarding cache properties for matched flows.
- <name>—Name of the flow map.
- <policy>—Policy for matched flows.
- <redundant-sources>—Redundant source addresses.

<flow-map> (configuration/logical-systems/routing-options/multicast)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <multicast>
 <flow-map>
 <name>name</name> <!-- identifier -->
 <policy>...</policy> <!-- mandatory -->
 <bandwidth>...</bandwidth>
 <redundant-sources>...</redundant-sources>
 <forwarding-cache>...</forwarding-cache>
 </flow-map>
 </multicast>
 </routing-options>
 </logical-systems>
 </configuration>

Description Multicast flow map configuration.

Contents <bandwidth>—Bandwidth properties for matched flows.
 <forwarding-cache>—Forwarding cache properties for matched flows.
 <name>—Name of the flow map.
 <policy>—Policy for matched flows.
 <redundant-sources>—Redundant source addresses.

<flow-map> (configuration/routing-instances/instance/routing-options/multicast)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <multicast>
 <flow-map>
 <name>*name*</name> <!-- identifier -->
 <policy>...</policy> <!-- mandatory -->
 <bandwidth>...</bandwidth>
 <redundant-sources>...</redundant-sources>
 <forwarding-cache>...</forwarding-cache>
 </flow-map>
 </multicast>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Multicast flow map configuration.

Contents <bandwidth>—Bandwidth properties for matched flows.
 <forwarding-cache>—Forwarding cache properties for matched flows.
 <name>—Name of the flow map.
 <policy>—Policy for matched flows.
 <redundant-sources>—Redundant source addresses.

<flow-map> (configuration/routing-options/multicast)

Usage <configuration>
 <routing-options>
 <multicast>
 <flow-map>
 <name>*name*</name> <!-- identifier -->
 <policy>...</policy> <!-- mandatory -->
 <bandwidth>...</bandwidth>
 <redundant-sources>...</redundant-sources>
 <forwarding-cache>...</forwarding-cache>
 </flow-map>
 </multicast>
 </routing-options>
 </configuration>

Description Multicast flow map configuration.

Contents <bandwidth>—Bandwidth properties for matched flows.
 <forwarding-cache>—Forwarding cache properties for matched flows.
 <name>—Name of the flow map.
 <policy>—Policy for matched flows.
 <redundant-sources>—Redundant source addresses.

<flow-monitoring> (configuration/services)

Usage <configuration>
 <services>
 <flow-monitoring>
 <version9>...</version9>
 </flow-monitoring>
 </services>
 </configuration>

Description Configure flow monitoring.

Contents <version9>—Version 9 configuration.

<flow-tap> (configuration/services)

Usage	<pre> <configuration> <services> <flow-tap> <interface>interface</interface> <!-- mandatory --> </flow-tap> </services> </configuration> </pre>
Description	Configure flow-tap parameters.
Contents	<interface>—Service interface on which to configure flow-tap service.

<flow-tap-dtcp> (configuration/system/services)

Usage	<pre> <configuration> <system> <services> <flow-tap-dtcp> <ssh>...</ssh> </flow-tap-dtcp> </services> </system> </configuration> </pre>
Description	Configure DTCP-based Flow-tap service.
Contents	<ssh>—Allow flow-tap-dtcp service over SSH.

<forward-flow> (configuration/services/service-set/service-order)

Usage	<pre> <configuration> <services> <service-set> <service-order> <forward-flow> <name>name</name> <!-- identifier --> </forward-flow> </service-order> </service-set> </services> </configuration> </pre>
Description	Service Order for forward flow.
Contents	<name>—Service Name.

<forwarding-cache> (configuration/bridge-domains/domain/multicast-snooping-options)

Usage <configuration>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <forwarding-cache>
 <threshold>...</threshold>
 </forwarding-cache>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </configuration>

Description Multicast forwarding cache.

Contents <threshold>—Threshold.

<forwarding-cache> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/multicast-snooping-options)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <forwarding-cache>
 <threshold>...</threshold>
 </forwarding-cache>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Multicast forwarding cache.

Contents <threshold>—Threshold.

<forwarding-cache> (configuration/logical-systems/ routing-instances/instance/multicast-snooping-options)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <multicast-snooping-options> <forwarding-cache> <threshold>...</threshold> </forwarding-cache> </multicast-snooping-options> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	Multicast forwarding cache.
Contents	<threshold>—Threshold.

<forwarding-cache> (configuration/logical-systems/ routing-instances/instance/routing-options/multicast)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <routing-options> <multicast> <forwarding-cache> <threshold>...</threshold> <timeout>timeout</timeout> </forwarding-cache> </multicast> </routing-options> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	Multicast forwarding cache.
Contents	<p><threshold>—Threshold.</p> <p><timeout>—Forwarding cache entry timeout in minutes.</p>

<forwarding-cache> (configuration/logical-systems/routing-instances/instance/routing-options/multicast/flow-map)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <multicast>
 <flow-map>
 <forwarding-cache>
 <timeout>...</timeout> <!-- mandatory -->
 </forwarding-cache>
 </flow-map>
 </multicast>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description Forwarding cache properties for matched flows.

Contents <timeout>—Timeout properties for matched flows.

<forwarding-cache> (configuration/logical-systems/routing-options/multicast)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <multicast>
 <forwarding-cache>
 <threshold>...</threshold>
 <timeout>*timeout*</timeout>
 </forwarding-cache>
 </multicast>
 </routing-options>
 </logical-systems>
</configuration>

Description Multicast forwarding cache.

Contents <threshold>—Threshold.

<timeout>—Forwarding cache entry timeout in minutes.

<forwarding-cache> (configuration/logical-systems/ routing-options/multicast/flow-map)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <multicast>
 <flow-map>
 <forwarding-cache>
 <timeout>...</timeout> <!-- mandatory -->
 </forwarding-cache>
 </flow-map>
 </multicast>
 </routing-options>
 </logical-systems>
 </configuration>

Description Forwarding cache properties for matched flows.

Contents <timeout>—Timeout properties for matched flows.

<forwarding-cache> (configuration/multicast-snooping-options)

Usage <configuration>
 <multicast-snooping-options>
 <forwarding-cache>
 <threshold>...</threshold>
 </forwarding-cache>
 </multicast-snooping-options>
 </configuration>

Description Multicast forwarding cache.

Contents <threshold>—Threshold.

<forwarding-cache> (configuration/routing-instances/instance/bridge-domains/domain/multicast-snooping-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <multicast-snooping-options>
 <forwarding-cache>
 <threshold>...</threshold>
 </forwarding-cache>
 </multicast-snooping-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </configuration>

Description Multicast forwarding cache.

Contents <threshold>—Threshold.

<forwarding-cache> (configuration/routing-instances/instance/multicast-snooping-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <multicast-snooping-options>
 <forwarding-cache>
 <threshold>...</threshold>
 </forwarding-cache>
 </multicast-snooping-options>
 </instance>
 </routing-instances>
 </configuration>

Description Multicast forwarding cache.

Contents <threshold>—Threshold.

<forwarding-cache> (configuration/routing-instances/instance/routing-options/multicast)

Usage	<pre> <configuration> <routing-instances> <instance> <routing-options> <multicast> <forwarding-cache> <threshold>...</threshold> <timeout>timeout</timeout> </forwarding-cache> </multicast> </routing-options> </instance> </routing-instances> </configuration> </pre>
Description	Multicast forwarding cache.
Contents	<p><threshold>—Threshold.</p> <p><timeout>—Forwarding cache entry timeout in minutes.</p>

<forwarding-cache> (configuration/routing-instances/instance/routing-options/multicast/flow-map)

Usage	<pre> <configuration> <routing-instances> <instance> <routing-options> <multicast> <flow-map> <forwarding-cache> <timeout>...</timeout> <!-- mandatory --> </forwarding-cache> </flow-map> </multicast> </routing-options> </instance> </routing-instances> </configuration> </pre>
Description	Forwarding cache properties for matched flows.
Contents	<timeout>—Timeout properties for matched flows.

<forwarding-cache> (configuration/routing-options/multicast)

Usage	<pre> <configuration> <routing-options> <multicast> <forwarding-cache> <threshold>...</threshold> <timeout>timeout</timeout> </forwarding-cache> </multicast> </routing-options> </configuration> </pre>
Description	Multicast forwarding cache.
Contents	<p><threshold>—Threshold.</p> <p><timeout>—Forwarding cache entry timeout in minutes.</p>

<forwarding-cache> (configuration/routing-options/multicast/flow-map)

Usage	<pre> <configuration> <routing-options> <multicast> <flow-map> <forwarding-cache> <timeout>...</timeout> <!-- mandatory --> </forwarding-cache> </flow-map> </multicast> </routing-options> </configuration> </pre>
Description	Forwarding cache properties for matched flows.
Contents	<timeout>—Timeout properties for matched flows.

<forwarding-class> (configuration/class-of-service/classifiers/dscp)

Usage	<pre> <configuration> <class-of-service> <classifiers> <dscp> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </dscp> </classifiers> </class-of-service> </configuration> </pre>
Description	Define a classification of code point aliases.
Contents	<p><loss-priority>—Classify code points to a loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/class-of-service/classifiers/dscp-ipv6)

Usage	<pre> <configuration> <class-of-service> <classifiers> <dscp-ipv6> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </dscp-ipv6> </classifiers> </class-of-service> </configuration> </pre>
Description	Define a classification of code point aliases.
Contents	<p><loss-priority>—Classify code points to a loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/class-of-service/classifiers/exp)

Usage	<pre> <configuration> <class-of-service> <classifiers> <exp> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </exp> </classifiers> </class-of-service> </configuration> </pre>
Description	Define a classification of code point aliases.
Contents	<p><loss-priority>—Classify code points to a loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/class-of-service/classifiers/ieee-802.1ad)

Usage	<pre> <configuration> <class-of-service> <classifiers> <ieee-802.1ad> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </ieee-802.1ad> </classifiers> </class-of-service> </configuration> </pre>
Description	Define a classification of code point aliases.
Contents	<p><loss-priority>—Classify code points to a loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/class-of-service/classifiers/ieee-802.1)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <ieee-802.1>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </ieee-802.1>
 </classifiers>
 </class-of-service>
 </configuration>

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/classifiers/inet-precedence)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <inet-precedence>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </inet-precedence>
 </classifiers>
 </class-of-service>
 </configuration>

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/ forwarding-policy/next-hop-map)

Usage <configuration>
 <class-of-service>
 <forwarding-policy>
 <next-hop-map>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 <next-hop>...</next-hop>
 <lsp-next-hop>...</lsp-next-hop>
 <non-lsp-next-hop/>
 <discard/>
 </forwarding-class>
 </next-hop-map>
 </forwarding-policy>
 </class-of-service>
 </configuration>

Description Forwarding class from which to map.

Contents <discard>—Discard next hop.

 <lsp-next-hop>—Regular expression for LSP next hop.

 <name>—Forwarding class.

 <next-hop>—Next-hop identifier to which to map.

 <non-lsp-next-hop>—Any non-RSVP LSP next hop.

<forwarding-class> (configuration/class-of-service/fragmentation-maps)

Usage <configuration>
 <class-of-service>
 <fragmentation-maps>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <fragment-threshold>*bytes*</fragment-threshold>
 <no-fragmentation/>
 <multilink-class>*multilink-class*</multilink-class>
 <drop-timeout>*milliseconds*</drop-timeout>
 </forwarding-class>
 </fragmentation-maps>
 </class-of-service>
 </configuration>

Description Forwarding class name to map to fragmentation options.

Contents <drop-timeout>—Drop timeout.
 <fragment-threshold>—Fragmentation threshold.
 <multilink-class>—Multilink-Class assigned to the forwarding class.
 <name>—Forwarding class name.
 <no-fragmentation>—Don't allow fragmentation.

<forwarding-class> (configuration/class-of-service/restricted-queues)

Usage <configuration>
 <class-of-service>
 <restricted-queues>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <rqueue-num>*rqueue-num*</rqueue-num>
 </forwarding-class>
 </restricted-queues>
 </class-of-service>
 </configuration>

Description Forwarding class to map to a restricted queue.

Contents <name>—Forwarding class name.
 <rqueue-num>—Restricted queue number.

<forwarding-class> (configuration/class-of-service/rewrite-rules/dscp)

Usage <configuration>
 <class-of-service>
 <rewrite-rules>
 <dscp>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </dscp>
 </rewrite-rules>
 </class-of-service>
 </configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/rewrite-rules/dscp-ipv6)

Usage <configuration>
 <class-of-service>
 <rewrite-rules>
 <dscp-ipv6>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </dscp-ipv6>
 </rewrite-rules>
 </class-of-service>
 </configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/rewrite-rules/exp)

Usage	<pre> <configuration> <class-of-service> <rewrite-rules> <exp> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </exp> </rewrite-rules> </class-of-service> </configuration> </pre>
Description	Markings for named forwarding class.
Contents	<p><loss-priority>—Code point marking based on loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/class-of-service/rewrite-rules/frame-relay-de)

Usage	<pre> <configuration> <class-of-service> <rewrite-rules> <frame-relay-de> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </frame-relay-de> </rewrite-rules> </class-of-service> </configuration> </pre>
Description	Markings for named forwarding class.
Contents	<p><loss-priority>—Code point marking based on loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/class-of-service/rewrite-rules/ieee-802.1)

Usage <configuration>
 <class-of-service>
 <rewrite-rules>
 <ieee-802.1>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </ieee-802.1>
 </rewrite-rules>
 </class-of-service>
 </configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/rewrite-rules/ieee-802.1ad)

Usage <configuration>
 <class-of-service>
 <rewrite-rules>
 <ieee-802.1ad>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </ieee-802.1ad>
 </rewrite-rules>
 </class-of-service>
 </configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/rewrite-rules/inet-precedence)

Usage <configuration>
 <class-of-service>
 <rewrite-rules>
 <inet-precedence>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </inet-precedence>
 </rewrite-rules>
 </class-of-service>
</configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/scheduler-maps)

Usage <configuration>
 <class-of-service>
 <scheduler-maps>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 <scheduler>scheduler</scheduler> <!-- mandatory -->
 </forwarding-class>
 </scheduler-maps>
 </class-of-service>
</configuration>

Description Forwarding class name to map to scheduler.

Contents <name>—Forwarding class name.
 <scheduler>—Scheduler name.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/classifiers/dscp)

- Usage** <configuration>
 <dynamic-profiles>
 <class-of-service>
 <classifiers>
 <dscp>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </dscp>
 </classifiers>
 </class-of-service>
 </dynamic-profiles>
</configuration>
- Description** Define a classification of code point aliases.
- Contents** <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/classifiers/dscp-ipv6)

- Usage** <configuration>
 <dynamic-profiles>
 <class-of-service>
 <classifiers>
 <dscp-ipv6>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </dscp-ipv6>
 </classifiers>
 </class-of-service>
 </dynamic-profiles>
</configuration>
- Description** Define a classification of code point aliases.
- Contents** <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/classifiers/exp)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <classifiers> <exp> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </exp> </classifiers> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Define a classification of code point aliases.
Contents	<p><loss-priority>—Classify code points to a loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/dynamic-profiles/class-of-service/classifiers/ieee-802.1)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <classifiers> <ieee-802.1> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </ieee-802.1> </classifiers> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Define a classification of code point aliases.
Contents	<p><loss-priority>—Classify code points to a loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/dynamic-profiles/class-of-service/classifiers/ieee-802.1ad)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <classifiers>
 <ieee-802.1ad>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </ieee-802.1ad>
 </classifiers>
 </class-of-service>
 </dynamic-profiles>
</configuration>

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/classifiers/inet-precedence)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <classifiers>
 <inet-precedence>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </inet-precedence>
 </classifiers>
 </class-of-service>
 </dynamic-profiles>
</configuration>

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/dynamic-profiles/ class-of-service/forwarding-policy/next-hop-map)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <forwarding-policy>
 <next-hop-map>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <next-hop>...</next-hop>
 <lsp-next-hop>...</lsp-next-hop>
 <non-lsp-next-hop/>
 <discard/>
 </forwarding-class>
 </next-hop-map>
 </forwarding-policy>
 </class-of-service>
 </dynamic-profiles>
</configuration>

Description Forwarding class from which to map.

Contents <discard>—Discard next hop.

<lsp-next-hop>—Regular expression for LSP next hop.

<name>—Forwarding class.

<next-hop>—Next-hop identifier to which to map.

<non-lsp-next-hop>—Any non-RSVP LSP next hop.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/fragmentation-maps)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <fragmentation-maps>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <fragment-threshold>*bytes*</fragment-threshold>
 <no-fragmentation/>
 <multilink-class>*multilink-class*</multilink-class>
 <drop-timeout>*milliseconds*</drop-timeout>
 </forwarding-class>
 </fragmentation-maps>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Forwarding class name to map to fragmentation options.

Contents <drop-timeout>—Drop timeout.
 <fragment-threshold>—Fragmentation threshold.
 <multilink-class>—Multilink-Class assigned to the forwarding class.
 <name>—Forwarding class name.
 <no-fragmentation>—Don't allow fragmentation.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/restricted-queues)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <restricted-queues>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <rqueue-num>*rqueue-num*</rqueue-num>
 </forwarding-class>
 </restricted-queues>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Forwarding class to map to a restricted queue.

Contents <name>—Forwarding class name.
 <rqueue-num>—Restricted queue number.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/rewrite-rules/dscp)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <rewrite-rules> <dscp> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </dscp> </rewrite-rules> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Markings for named forwarding class.
Contents	<p><loss-priority>—Code point marking based on loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/dynamic-profiles/class-of-service/rewrite-rules/dscp-ipv6)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <rewrite-rules> <dscp-ipv6> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </dscp-ipv6> </rewrite-rules> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Markings for named forwarding class.
Contents	<p><loss-priority>—Code point marking based on loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/dynamic-profiles/class-of-service/rewrite-rules/exp)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <rewrite-rules> <exp> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </exp> </rewrite-rules> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Markings for named forwarding class.
Contents	<p><loss-priority>—Code point marking based on loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/dynamic-profiles/class-of-service/rewrite-rules/frame-relay-de)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <rewrite-rules> <frame-relay-de> <forwarding-class> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </forwarding-class> </frame-relay-de> </rewrite-rules> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Markings for named forwarding class.
Contents	<p><loss-priority>—Code point marking based on loss priority.</p> <p><name>—Forwarding class name.</p>

<forwarding-class> (configuration/dynamic-profiles/class-of-service/rewrite-rules/ieee-802.1ad)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <rewrite-rules>
 <ieee-802.1ad>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </ieee-802.1ad>
 </rewrite-rules>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/rewrite-rules/ieee-802.1)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <rewrite-rules>
 <ieee-802.1>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </ieee-802.1>
 </rewrite-rules>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/rewrite-rules/inet-precedence)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <rewrite-rules>
 <inet-precedence>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </inet-precedence>
 </rewrite-rules>
 </class-of-service>
 </dynamic-profiles>
</configuration>

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/dynamic-profiles/class-of-service/scheduler-maps)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <scheduler-maps>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <scheduler>*scheduler*</scheduler> <!-- mandatory -->
 </forwarding-class>
 </scheduler-maps>
 </class-of-service>
 </dynamic-profiles>
</configuration>

Description Forwarding class name to map to scheduler.

Contents <name>—Forwarding class name.
 <scheduler>—Scheduler name.

<forwarding-class> (configuration/dynamic-profiles/interfaces/ interface/atm-options/scheduler-maps)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <interface>
 <atm-options>
 <scheduler-maps>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <priority>*priority-choice*</priority>
 <transmit-weight>...</transmit-weight>
 <epd-threshold>...</epd-threshold>
 <linear-red-profile>*linear-red-profile*</linear-red-profile>
 </forwarding-class>
 </scheduler-maps>
 </atm-options>
 </interface>
 </interfaces>
 </dynamic-profiles>
 </configuration>

Description Scheduling parameters associated with forwarding class.

Contents <epd-threshold>—Early packet discard threshold for ATM2.

<linear-red-profile>—Linear RED profile profile name.

<name>—Forwarding class name.

<priority>—Queuing priority assigned to forwarding class.

■ high—High priority queuing.

■ low—Low priority queuing.

<transmit-weight>—Transmit weight.

<forwarding-class> (configuration/dynamic-profiles/interfaces/interface/gigether-options/ethernet-switch-profile/ethernet-policer-profile/output-priority-map/classifier/premium)

Usage <configuration>
 <dynamic-profiles>
 <interfaces>
 <interface>
 <gigether-options>
 <ethernet-switch-profile>
 <ethernet-policer-profile>
 <output-priority-map>
 <classifier>
 <premium>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </premium>
 </classifier>
 </output-priority-map>
 </ethernet-policer-profile>
 </ethernet-switch-profile>
 </gigether-options>
 </interface>
 </interfaces>
</dynamic-profiles>
</configuration>

Description Select a classification for this priority map.

Contents <loss-priority>—Select a loss priority.

<name>—Forwarding class name.

<forwarding-class> (configuration/firewall/family/any/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <any>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </any>
 </family>
 </firewall>
</configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/family/bridge/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <bridge>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </bridge>
 </family>
 </firewall>
</configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/family/ccc/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <ccc>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </ccc>
 </family>
 </firewall>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/family/inet/simple-filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <simple-filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </simple-filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/family/inet6/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
</configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/family/mpls/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <mpls>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </mpls>
 </family>
 </firewall>
</configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/family/vpls/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <vpls>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </vpls>
 </family>
 </firewall>
</configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/firewall/filter/term/from)

Usage <configuration>
 <firewall>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </firewall>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/interfaces/interface/atm-options/scheduler-maps)

Usage <configuration>
 <interfaces>
 <interface>
 <atm-options>
 <scheduler-maps>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <priority>*priority-choice*</priority>
 <transmit-weight>...</transmit-weight>
 <epd-threshold>...</epd-threshold>
 <linear-red-profile>*linear-red-profile*</linear-red-profile>
 </forwarding-class>
 </scheduler-maps>
 </atm-options>
 </interface>
 </interfaces>
 </configuration>

Description Scheduling parameters associated with forwarding class.

Contents <epd-threshold>—Early packet discard threshold for ATM2.

 <linear-red-profile>—Linear RED profile profile name.

 <name>—Forwarding class name.

 <priority>—Queuing priority assigned to forwarding class.

 ■ high—High priority queuing.

 ■ low—Low priority queuing.

 <transmit-weight>—Transmit weight.

<forwarding-class> (configuration/interfaces/interface/ gigether-options/ethernet-switch-profile/ ethernet-policer-profile/output-priority-map/classifier/premium)

Usage <configuration>
 <interfaces>
 <interface>
 <gigether-options>
 <ethernet-switch-profile>
 <ethernet-policer-profile>
 <output-priority-map>
 <classifier>
 <premium>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </premium>
 </classifier>
 </output-priority-map>
 </ethernet-policer-profile>
 </ethernet-switch-profile>
 </gigether-options>
 </interface>
 </interfaces>
 </configuration>

Description Select a classification for this priority map.

Contents <loss-priority>—Select a loss priority.

 <name>—Forwarding class name.

<forwarding-class> (configuration/logical-systems/firewall/family/any/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <any>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </any>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/family/bridge/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <bridge>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </bridge>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/family/ccc/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <ccc>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </ccc>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/family/inet/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/family/inet/simple-filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <simple-filter>
 <term>
 <from>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </simple-filter>
 </inet>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/family/inet6/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/family/mpls/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <mpls>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </mpls>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/family/vpls/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <vpls>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </vpls>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class> (configuration/logical-systems/firewall/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <filter>
 <term>
 <from>
 <forwarding-class>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class>
 </from>
 </term>
 </filter>
 </firewall>
 </logical-systems>
</configuration>

Description Match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/family/any/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <any>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </any>
 </family>
</firewall>
</configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/family/bridge/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <bridge>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </bridge>
 </family>
 </firewall>
</configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/family/ccc/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <ccc>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </ccc>
 </family>
 </firewall>
</configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/family/inet6/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
</configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/family/mps/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <mps>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </mps>
 </family>
 </firewall>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/family/vpls/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <vpls>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </vpls>
 </family>
 </firewall>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/firewall/filter/term/from)

Usage <configuration>
 <firewall>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </firewall>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/family/any/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <any>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </any>
 </family>
</firewall>
</logical-systems>
</configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/family/bridge/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <bridge>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>name</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </bridge>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/family/ccc/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <ccc>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>name</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </ccc>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/family/inet/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>name</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/family/inet6/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>name</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/family/mps/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <mps>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </mps>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/family/vpls/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <vpls>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </vpls>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-class-except> (configuration/logical-systems/firewall/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <filter>
 <term>
 <from>
 <forwarding-class-except>
 <name>*name*</name> <!-- identifier -->
 </forwarding-class-except>
 </from>
 </term>
 </filter>
 </firewall>
 </logical-systems>
</configuration>

Description Do not match forwarding class.

Contents <name>—String name.

<forwarding-classes> (configuration/class-of-service)

Usage <configuration>
 <class-of-service>
 <forwarding-classes>
 <class>...</class>
 <queue>...</queue>
 </forwarding-classes>
 </class-of-service>
 </configuration>

Description One or more mappings of forwarding class to queue number.

Contents <class>—Forwarding class to map to queue number.

<queue>—Queue number to map to forwarding class.

<forwarding-classes> (configuration/dynamic-profiles/ class-of-service)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <forwarding-classes>
 <class>...</class>
 <queue>...</queue>
 </forwarding-classes>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description One or more mappings of forwarding class to queue number.

Contents <class>—Forwarding class to map to queue number.
 <queue>—Queue number to map to forwarding class.

<forwarding-options> (configuration)

Usage <configuration>
 <forwarding-options>
 <sampling>...</sampling>
 <packet-capture>...</packet-capture>
 <monitoring>...</monitoring>
 <accounting>...</accounting>
 <port-mirroring>...</port-mirroring>
 <load-balance>...</load-balance>
 <hash-key>...</hash-key>
 <helpers>...</helpers>
 <family>...</family>
 <next-hop-group>...</next-hop-group>
 <dhcp-relay>...</dhcp-relay>
 </forwarding-options>
 </configuration>

Description Configure options to control packet forwarding.

Contents <accounting>—Configure accounting of traffic.

<dhcp-relay>—Dynamic Host Configuration Protocol relay configuration.

<family>—Protocol family.

<hash-key>—Select data used in the hash key.

<helpers>—Port forwarding configuration.

<load-balance>—Configure load-balancing attributes on the forwarding path.

<monitoring>—Configure lawful interception of traffic.

<next-hop-group>—Next hop group forwarding option.

<packet-capture>—Packet capture options.

<port-mirroring>—Configure port mirroring of traffic.

<sampling>—Statistical traffic sampling options.

<forwarding-options> (configuration/bridge-domains/domain)

Usage <configuration>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <filter>...</filter>
 <flood>...</flood>
 <dhcp-relay>...</dhcp-relay>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </configuration>

Description Forwarding options configuration.

Contents <dhcp-relay>—Dynamic Host Configuration Protocol relay configuration.
 <filter>—Filtering for bridge forwarding table.
 <flood>—Filtering for bridge flood table.

<forwarding-options> (configuration/logical-systems)

Usage <configuration>
 <logical-systems>
 <forwarding-options>
 <dhcp-relay>...</dhcp-relay>
 </forwarding-options>
 </logical-systems>
 </configuration>

Description Configure options to control packet forwarding.

Contents <dhcp-relay>—Dynamic Host Configuration Protocol relay configuration.

<forwarding-options> (configuration/logical-systems/routing-instances/instance)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <forwarding-options>
 <sampling>...</sampling>
 <packet-capture>...</packet-capture>
 <monitoring>...</monitoring>
 <accounting>...</accounting>
 <port-mirroring>...</port-mirroring>
 <load-balance>...</load-balance>
 <hash-key>...</hash-key>
 <helpers>...</helpers>
 <family>...</family>
 <next-hop-group>...</next-hop-group>
 <dhcp-relay>...</dhcp-relay>
 </forwarding-options>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Forwarding options configuration.

Contents <accounting>—Configure accounting of traffic.

<dhcp-relay>—Dynamic Host Configuration Protocol relay configuration.

<family>—Protocol family.

<hash-key>—Select data used in the hash key.

<helpers>—Port forwarding configuration.

<load-balance>—Configure load-balancing attributes on the forwarding path.

<monitoring>—Configure lawful interception of traffic.

<next-hop-group>—Next hop group forwarding option.

<packet-capture>—Packet capture options.

<port-mirroring>—Configure port mirroring of traffic.

<sampling>—Statistical traffic sampling options.

**<forwarding-options> (configuration/logical-systems/
routing-instances/instance/bridge-domains/domain)**

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <bridge-domains>
 <domain>
 <forwarding-options>
 <filter>...</filter>
 <flood>...</flood>
 <dhcp-relay>...</dhcp-relay>
 </forwarding-options>
 </domain>
 </bridge-domains>
 </instance>
 </routing-instances>
 </logical-systems>
 </configuration>

Description Forwarding options configuration.

Contents <dhcp-relay>—Dynamic Host Configuration Protocol relay configuration.

 <filter>—Filtering for bridge forwarding table.

 <flood>—Filtering for bridge flood table.

<forwarding-options> (configuration/routing-instances/instance)

Usage <configuration>
 <routing-instances>
 <instance>
 <forwarding-options>
 <sampling>...</sampling>
 <packet-capture>...</packet-capture>
 <monitoring>...</monitoring>
 <accounting>...</accounting>
 <port-mirroring>...</port-mirroring>
 <load-balance>...</load-balance>
 <hash-key>...</hash-key>
 <helpers>...</helpers>
 <family>...</family>
 <next-hop-group>...</next-hop-group>
 <dhcp-relay>...</dhcp-relay>
 </forwarding-options>
 </instance>
 </routing-instances>
 </configuration>

Description Forwarding options configuration.

Contents <accounting>—Configure accounting of traffic.

<dhcp-relay>—Dynamic Host Configuration Protocol relay configuration.

<family>—Protocol family.

<hash-key>—Select data used in the hash key.

<helpers>—Port forwarding configuration.

<load-balance>—Configure load-balancing attributes on the forwarding path.

<monitoring>—Configure lawful interception of traffic.

<next-hop-group>—Next hop group forwarding option.

<packet-capture>—Packet capture options.

<port-mirroring>—Configure port mirroring of traffic.

<sampling>—Statistical traffic sampling options.

<forwarding-options> (configuration/routing-instances/instance/bridge-domains/domain)

Usage	<pre> <configuration> <routing-instances> <instance> <bridge-domains> <domain> <forwarding-options> <filter>...</filter> <flood>...</flood> <dhcp-relay>...</dhcp-relay> </forwarding-options> </domain> </bridge-domains> </instance> </routing-instances> </configuration> </pre>
Description	Forwarding options configuration.
Contents	<p><dhcp-relay>—Dynamic Host Configuration Protocol relay configuration.</p> <p><filter>—Filtering for bridge forwarding table.</p> <p><flood>—Filtering for bridge flood table.</p>

<forwarding-policy> (configuration/class-of-service)

Usage	<pre> <configuration> <class-of-service> <forwarding-policy> <next-hop-map>...</next-hop-map> <class>...</class> </forwarding-policy> </class-of-service> </configuration> </pre>
Description	Class-of-service forwarding policy.
Contents	<p><class>—Class-of-service description.</p> <p><next-hop-map>—Class-of-service next-hop map.</p>

<forwarding-policy> (configuration/dynamic-profiles/class-of-service)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <forwarding-policy> <next-hop-map>...</next-hop-map> <class>...</class> </forwarding-policy> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Class-of-service forwarding policy.
Contents	<p><class>—Class-of-service description.</p> <p><next-hop-map>—Class-of-service next-hop map.</p>

<forwarding-table> (configuration/logical-systems/routing-instances/instance/routing-options)

Usage	<pre> <configuration> <logical-systems> <routing-instances> <instance> <routing-options> <forwarding-table> <export>...</export> <indirect-next-hop/> <unicast-reverse-path>unicast-reverse-path-choice</unicast-reverse-path> </forwarding-table> </routing-options> </instance> </routing-instances> </logical-systems> </configuration> </pre>
Description	No documentation is available yet.
Contents	<p><export>—Export policy.</p> <p><indirect-next-hop>—Install indirect next hops in Packet Forwarding Engine.</p> <p><unicast-reverse-path>—Unicast reverse path (RP) verification.</p> <ul style="list-style-type: none"> ■ active-paths—Consider active paths when performing RP verification. ■ feasible-paths—Consider all feasible paths for RP verification.

<forwarding-table> (configuration/logical-systems/ routing-options)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <forwarding-table>
 <export>...</export>
 <indirect-next-hop/>
 <unicast-reverse-path>*unicast-reverse-path-choice*</unicast-reverse-path>
 </forwarding-table>
 </routing-options>
 </logical-systems>
 </configuration>

Description No documentation is available yet.

Contents <export>—Export policy.

 <indirect-next-hop>—Install indirect next hops in Packet Forwarding Engine.

 <unicast-reverse-path>—Unicast reverse path (RP) verification.

- active-paths—Consider active paths when performing RP verification.
- feasible-paths—Consider all feasible paths for RP verification.

<forwarding-table> (configuration/routing-instances/instance/routing-options)

Usage	<pre> <configuration> <routing-instances> <instance> <routing-options> <forwarding-table> <export>...</export> <indirect-next-hop/> <unicast-reverse-path>unicast-reverse-path-choice</unicast-reverse-path> </forwarding-table> </routing-options> </instance> </routing-instances> </configuration> </pre>
Description	No documentation is available yet.
Contents	<p><export>—Export policy.</p> <p><indirect-next-hop>—Install indirect next hops in Packet Forwarding Engine.</p> <p><unicast-reverse-path>—Unicast reverse path (RP) verification.</p> <ul style="list-style-type: none"> ■ active-paths—Consider active paths when performing RP verification. ■ feasible-paths—Consider all feasible paths for RP verification.

<forwarding-table> (configuration/routing-options)

Usage	<pre> <configuration> <routing-options> <forwarding-table> <export>...</export> <indirect-next-hop/> <unicast-reverse-path>unicast-reverse-path-choice</unicast-reverse-path> </forwarding-table> </routing-options> </configuration> </pre>
Description	No documentation is available yet.
Contents	<p><export>—Export policy.</p> <p><indirect-next-hop>—Install indirect next hops in Packet Forwarding Engine.</p> <p><unicast-reverse-path>—Unicast reverse path (RP) verification.</p> <ul style="list-style-type: none"> ■ active-paths—Consider active paths when performing RP verification. ■ feasible-paths—Consider all feasible paths for RP verification.

<fpc> (configuration/chassis)

Usage <configuration>
 <chassis>
 <fpc>
 <name>*name*</name> <!-- identifier -->
 <pic>...</pic>
 <power>*power-choice*</power>
 <allow-sram-parity-errors/>
 <offline/>
 <port-mirror-instance>*port-mirror-instance*</port-mirror-instance>
 </fpc>
 </chassis>
 </configuration>

Description Flexible PIC Concentrator parameters.

Contents <allow-sram-parity-errors>—Do not power cycle FPC when SRAM parity errors occur.

<name>—FPC slot number.

<offline>—Keep FPC offline.

<pic>—Physical Interface Card number.

<port-mirror-instance>—Associate a port mirroring instance with the FPC.

<power>—Power FPCs on or off.

- off—Do not provide power to FPCs.
- on—Provide power to FPCs.

<fpc> (configuration/chassis/fpc-feb-connectivity)

Usage <configuration>
 <chassis>
 <fpc-feb-connectivity>
 <fpc>
 <name>*name*</name> <!-- identifier -->
 <feb>...</feb> <!-- mandatory -->
 </fpc>
 </fpc-feb-connectivity>
 </chassis>
 </configuration>

Description No documentation is available yet.

Contents <feb>—FEB slot number.

<name>—FPC slot number.

<fpc> (configuration/chassis/lcc)

Usage <configuration>
 <chassis>
 <lcc>
 <fpc>
 <name>*name*</name> <!-- identifier -->
 <pic>...</pic>
 <power>*power-choice*</power>
 <allow-sram-parity-errors/>
 <offline/>
 <port-mirror-instance>*port-mirror-instance*</port-mirror-instance>
 </fpc>
 </lcc>
 </chassis>
 </configuration>

Description Flexible PIC Concentrator parameters.

Contents <allow-sram-parity-errors>—Do not power cycle FPC when SRAM parity errors occur.

 <name>—FPC slot number.

 <offline>—Keep FPC offline.

 <pic>—Physical Interface Card number.

 <port-mirror-instance>—Associate a port mirroring instance with the FPC.

 <power>—Power FPCs on or off.

 ■ off—Do not provide power to FPCs.

 ■ on—Provide power to FPCs.

<fpc> (configuration/chassis/lcd)

Usage	<pre><configuration> <chassis> <lcd> <fpc> <name>name</name> <!-- identifier --> <maintenance-menu/> <disable/> </fpc> </lcd> </chassis> </configuration></pre>
Description	No documentation is available yet.
Contents	<p><disable>—Disable maintenance-menu.</p> <p><maintenance-menu>—LCD maintenance menu.</p> <p><name>—FPC slot number.</p>

<fpc-feb-connectivity> (configuration/chassis)

Usage	<pre><configuration> <chassis> <fpc-feb-connectivity> <fpc>...</fpc> </fpc-feb-connectivity> </chassis> </configuration></pre>
Description	Connectivity between Flexible PIC Concentrators and Forwarding Engine Boards.
Contents	<fpc>—No documentation is available yet.

<fpcs> (configuration/chassis/system-domains/protected-system-domains)

Usage <configuration>
 <chassis>
 <system-domains>
 <protected-system-domains>
 <fpcs>
 <name>name</name> <!-- identifier -->
 </fpcs>
 </protected-system-domains>
 </system-domains>
 </chassis>
 </configuration>

Description FPC associated with protected system domain.

Contents <name>—FPC associated with protected system domain.

<fqdn> (configuration/services/ipsec-vpn/ike/policy/remote-id)

Usage <configuration>
 <services>
 <ipsec-vpn>
 <ike>
 <policy>
 <remote-id>
 <fqdn>
 <name>name</name> <!-- identifier -->
 </fqdn>
 </remote-id>
 </policy>
 </ike>
 </ipsec-vpn>
 </services>
 </configuration>

Description One or more fully qualified domain name values.

Contents <name>—One or more fully qualified domain name values.

<fragment> (configuration/logical-systems/routing-instances/instance/routing-options/flow/route/match)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <flow>
 <route>
 <match>
 <fragment>
 <name>name</name> <!-- identifier -->
 </fragment>
 </match>
 </route>
 </flow>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description No documentation is available yet.

Contents <name>—No documentation is available yet.

- dont-fragment—Don't Fragment flag is set.
- first-fragment—First fragment.
- is-fragment—Fragmented packet.
- last-fragment—Last fragment.
- not-a-fragment—Not a fragment.

<fragment> (configuration/logical-systems/routing-options/flow/ route/ match)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <flow>
 <route>
 <match>
 <fragment>
 <name>name</name> <!-- identifier -->
 </fragment>
 </match>
 </route>
 </flow>
 </routing-options>
 </logical-systems>
</configuration>

Description No documentation is available yet.

Contents <name>—No documentation is available yet.

- dont-fragment—Don't Fragment flag is set.
- first-fragment—First fragment.
- is-fragment—Fragmented packet.
- last-fragment—Last fragment.
- not-a-fragment—Not a fragment.

**<fragment> (configuration/routing-instances/instance/
routing-options/flow/route/match)**

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <flow>
 <route>
 <match>
 <fragment>
 <name>*name*</name> <!-- identifier -->
 </fragment>
 </match>
 </route>
 </flow>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description No documentation is available yet.

Contents <name>—No documentation is available yet.

- dont-fragment—Don't Fragment flag is set.
- first-fragment—First fragment.
- is-fragment—Fragmented packet.
- last-fragment—Last fragment.
- not-a-fragment—Not a fragment.

<fragment> (configuration/routing-options/flow/route/match)

Usage <configuration>
 <routing-options>
 <flow>
 <route>
 <match>
 <fragment>
 <name>*name*</name> <!-- identifier -->
 </fragment>
 </match>
 </route>
 </flow>
 </routing-options>
 </configuration>

Description No documentation is available yet.

Contents <name>—No documentation is available yet.

- dont-fragment—Don't Fragment flag is set.
- first-fragment—First fragment.
- is-fragment—Fragmented packet.
- last-fragment—Last fragment.
- not-a-fragment—Not a fragment.

<fragment-offset> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <fragment-offset>
 <name>*name*</name> <!-- identifier -->
 </fragment-offset>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Match fragment offset.

Contents <name>—Range of values.

<fragment-offset> (configuration/firewall/family/inet/service-filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <service-filter>
 <term>
 <from>
 <fragment-offset>
 <name>*name*</name> <!-- identifier -->
 </fragment-offset>
 </from>
 </term>
 </service-filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Match fragment offset.

Contents <name>—Range of values.

<fragment-offset> (configuration/firewall/filter/term/from)

Usage	<pre> <configuration> <firewall> <filter> <term> <from> <fragment-offset> <name>name</name> <!-- identifier --> </fragment-offset> </from> </term> </filter> </firewall> </configuration> </pre>
Description	Match fragment offset.
Contents	<name>—Range of values.

<fragment-offset> (configuration/logical-systems/firewall/family/inet/filter/term/from)

Usage	<pre> <configuration> <logical-systems> <firewall> <family> <inet> <filter> <term> <from> <fragment-offset> <name>name</name> <!-- identifier --> </fragment-offset> </from> </term> </filter> </inet> </family> </firewall> </logical-systems> </configuration> </pre>
Description	Match fragment offset.
Contents	<name>—Range of values.

<fragment-offset> (configuration/logical-systems/firewall/family/inet/service-filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <service-filter>
 <term>
 <from>
 <fragment-offset>
 <name>name</name> <!-- identifier -->
 </fragment-offset>
 </from>
 </term>
 </service-filter>
 </inet>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Match fragment offset.

Contents <name>—Range of values.

<fragment-offset> (configuration/logical-systems/firewall/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <filter>
 <term>
 <from>
 <fragment-offset>
 <name>name</name> <!-- identifier -->
 </fragment-offset>
 </from>
 </term>
 </filter>
 </firewall>
 </logical-systems>
 </configuration>

Description Match fragment offset.

Contents <name>—Range of values.

<fragment-offset-except> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <fragment-offset-except>
 <name>*name*</name> <!-- identifier -->
 </fragment-offset-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

Description Do not match fragment offset.

Contents <name>—Range of values.

<fragment-offset-except> (configuration/firewall/family/inet/service-filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <service-filter>
 <term>
 <from>
 <fragment-offset-except>
 <name>*name*</name> <!-- identifier -->
 </fragment-offset-except>
 </from>
 </term>
 </service-filter>
 </inet>
 </family>
 </firewall>
 </configuration>

Description Do not match fragment offset.

Contents <name>—Range of values.

<fragment-offset-except> (configuration/firewall/filter/term/from)

Usage <configuration>
 <firewall>
 <filter>
 <term>
 <from>
 <fragment-offset-except>
 <name>*name*</name> <!-- identifier -->
 </fragment-offset-except>
 </from>
 </term>
 </filter>
 </firewall>
 </configuration>

Description Do not match fragment offset.

Contents <name>—Range of values.

<fragment-offset-except> (configuration/logical-systems/firewall/family/inet/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <fragment-offset-except>
 <name>*name*</name> <!-- identifier -->
 </fragment-offset-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match fragment offset.

Contents <name>—Range of values.

<fragment-offset-except> (configuration/logical-systems/firewall/family/inet/service-filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <service-filter>
 <term>
 <from>
 <fragment-offset-except>
 <name>name</name> <!-- identifier -->
 </fragment-offset-except>
 </from>
 </term>
 </service-filter>
 </inet>
 </family>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match fragment offset.

Contents <name>—Range of values.

<fragment-offset-except> (configuration/logical-systems/firewall/filter/term/from)

Usage <configuration>
 <logical-systems>
 <firewall>
 <filter>
 <term>
 <from>
 <fragment-offset-except>
 <name>name</name> <!-- identifier -->
 </fragment-offset-except>
 </from>
 </term>
 </filter>
 </firewall>
 </logical-systems>
 </configuration>

Description Do not match fragment offset.

Contents <name>—Range of values.

<fragmentation-maps> (configuration/class-of-service)

Usage <configuration>
 <class-of-service>
 <fragmentation-maps>
 <name>*name*</name> <!-- identifier -->
 <forwarding-class>...</forwarding-class>
 </fragmentation-maps>
 </class-of-service>
 </configuration>

Description Mapping of forwarding class to fragmentation options.

Contents <forwarding-class>—Forwarding class name to map to fragmentation options.
 <name>—Fragmentation map name.

<fragmentation-maps> (configuration/dynamic-profiles/class-of-service)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <fragmentation-maps>
 <name>*name*</name> <!-- identifier -->
 <forwarding-class>...</forwarding-class>
 </fragmentation-maps>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Mapping of forwarding class to fragmentation options.

Contents <forwarding-class>—Forwarding class name to map to fragmentation options.
 <name>—Fragmentation map name.

<frame-relay-de> (configuration/class-of-service/interfaces/ interface/unit/loss-priority-maps)

Usage <configuration>
 <class-of-service>
 <interfaces>
 <interface>
 <unit>
 <loss-priority-maps>
 <frame-relay-de>
 <lpmap-name>*lpmap-name*</lpmap-name>
 </frame-relay-de>
 </loss-priority-maps>
 </unit>
 </interface>
 </interfaces>
 </class-of-service>
 </configuration>

Description Frame Relay discard eligible bit loss priority map.

Contents <lpmap-name>—Name of loss priority map to be applied.

<frame-relay-de> (configuration/class-of-service/interfaces/ interface/unit/rewrite-rules)

Usage <configuration>
 <class-of-service>
 <interfaces>
 <interface>
 <unit>
 <rewrite-rules>
 <frame-relay-de>
 <rewrite-rule-name>*rewrite-rule-name*</rewrite-rule-name>
 </frame-relay-de>
 </rewrite-rules>
 </unit>
 </interface>
 </interfaces>
 </class-of-service>
 </configuration>

Description Frame relay discard eligible bit rewrite rule.

Contents <rewrite-rule-name>—Name of rewrite rule to be applied.

<frame-relay-de> (configuration/class-of-service/loss-priority-maps)

Usage	<pre> <configuration> <class-of-service> <loss-priority-maps> <frame-relay-de> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </frame-relay-de> </loss-priority-maps> </class-of-service> </configuration> </pre>
Description	Frame relay discard eligible bit loss priority map.
Contents	<p><loss-priority>—Map code points to a loss priority.</p> <p><name>—Loss priority map name.</p>

<frame-relay-de> (configuration/class-of-service/rewrite-rules)

Usage	<pre> <configuration> <class-of-service> <rewrite-rules> <frame-relay-de> <name>name</name> <!-- identifier --> <import>import</import> <forwarding-class>...</forwarding-class> </frame-relay-de> </rewrite-rules> </class-of-service> </configuration> </pre>
Description	Frame relay discard eligible bit rewrite rule.
Contents	<p><forwarding-class>—Markings for named forwarding class.</p> <p><import>—Include this rewrite rule in this definition.</p> <p><name>—Rewrite rule name.</p>

<frame-relay-de> (configuration/dynamic-profiles/ class-of-service/interfaces/interface/unit/loss-priority-maps)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <interfaces>
 <interface>
 <unit>
 <loss-priority-maps>
 <frame-relay-de>
 <lmap-name>lmap-name</lmap-name>
 </frame-relay-de>
 </loss-priority-maps>
 </unit>
 </interface>
 </interfaces>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Frame Relay discard eligible bit loss priority map.

Contents <lmap-name>—Name of loss priority map to be applied.

<frame-relay-de> (configuration/dynamic-profiles/ class-of-service/interfaces/interface/unit/rewrite-rules)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <interfaces>
 <interface>
 <unit>
 <rewrite-rules>
 <frame-relay-de>
 <rewrite-rule-name>rewrite-rule-name</rewrite-rule-name>
 </frame-relay-de>
 </rewrite-rules>
 </unit>
 </interface>
 </interfaces>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description Frame relay discard eligible bit rewrite rule.

Contents <rewrite-rule-name>—Name of rewrite rule to be applied.

<frame-relay-de> (configuration/dynamic-profiles/class-of-service/loss-priority-maps)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <loss-priority-maps> <frame-relay-de> <name>name</name> <!-- identifier --> <loss-priority>...</loss-priority> </frame-relay-de> </loss-priority-maps> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Frame relay discard eligible bit loss priority map.
Contents	<p><loss-priority>—Map code points to a loss priority.</p> <p><name>—Loss priority map name.</p>

<frame-relay-de> (configuration/dynamic-profiles/class-of-service/rewrite-rules)

Usage	<pre> <configuration> <dynamic-profiles> <class-of-service> <rewrite-rules> <frame-relay-de> <name>name</name> <!-- identifier --> <import>import</import> <forwarding-class>...</forwarding-class> </frame-relay-de> </rewrite-rules> </class-of-service> </dynamic-profiles> </configuration> </pre>
Description	Frame relay discard eligible bit rewrite rule.
Contents	<p><forwarding-class>—Markings for named forwarding class.</p> <p><import>—Include this rewrite rule in this definition.</p> <p><name>—Rewrite rule name.</p>

<framed-ip-address> (configuration/access/profile/radius/attributes/exclude)

Usage <configuration>
 <access>
 <profile>
 <radius>
 <attributes>
 <exclude>
 <framed-ip-address>
 <name>name</name> <!-- identifier -->
 </framed-ip-address>
 </exclude>
 </attributes>
 </radius>
 </profile>
 </access>
</configuration>

Description Excludes RADIUS attribute 8, Framed-IP-Address.

Contents <name>—Excludes RADIUS attribute 8, Framed-IP-Address.

- accounting-start—RADIUS Accounting-Start message.
- accounting-stop—RADIUS Accounting-Stop message.

<framed-ip-netmask> (configuration/access/profile/radius/attributes/exclude)

Usage <configuration>
 <access>
 <profile>
 <radius>
 <attributes>
 <exclude>
 <framed-ip-netmask>
 <name>name</name> <!-- identifier -->
 </framed-ip-netmask>
 </exclude>
 </attributes>
 </radius>
 </profile>
 </access>
</configuration>

Description Excludes RADIUS attribute 9, Framed-IP-Netmask.

Contents <name>—Excludes RADIUS attribute 9, Framed-IP-Netmask.

- accounting-start—RADIUS Accounting-Start message.
- accounting-stop—RADIUS Accounting-Stop message.

<framing> (configuration/dynamic-profiles/interfaces/interface)

Usage	<pre> <configuration> <dynamic-profiles> <interfaces> <interface> <framing> <lan-phy/> <wan-phy/> <sonet/> <sdh/> </framing> </interface> </interfaces> </dynamic-profiles> </configuration> </pre>
Description	Frame type.
Contents	<p><lan-phy>—802.3ae 10-Gbps LAN-mode interface.</p> <p><sdh>—SDH framing.</p> <p><sonet>—SONET framing.</p> <p><wan-phy>—802.3ae 10-Gbps WAN-mode interface.</p>

<framing> (configuration/interfaces/interface)

Usage	<pre> <configuration> <interfaces> <interface> <framing> <lan-phy/> <wan-phy/> <sonet/> <sdh/> </framing> </interface> </interfaces> </configuration> </pre>
Description	Frame type.
Contents	<p><lan-phy>—802.3ae 10-Gbps LAN-mode interface.</p> <p><sdh>—SDH framing.</p> <p><sonet>—SONET framing.</p> <p><wan-phy>—802.3ae 10-Gbps WAN-mode interface.</p>

<from> (configuration/firewall/family/any/filter/term)

Usage <configuration>
 <firewall>
 <family>
 <any>
 <filter>
 <term>
 <from>
 <interface>...</interface>
 <interface-set>...</interface-set>
 <packet-length>...</packet-length>
 <packet-length-except>...</packet-length-except>
 <forwarding-class>...</forwarding-class>
 <forwarding-class-except>...</forwarding-class-except>
 <loss-priority>...</loss-priority>
 <loss-priority-except>...</loss-priority-except>
 </from>
 </term>
 </filter>
 </any>
 </family>
 </firewall>
</configuration>

Description Define match criteria.

Contents <forwarding-class>—Match forwarding class.

<forwarding-class-except>—Do not match forwarding class.

<interface>—Match interface name.

<interface-set>—Match interface in set.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<packet-length>—Match packet length.

<packet-length-except>—Do not match packet length.

<from> (configuration/firewall/family/bridge/filter/term)

```

Usage  <configuration>
      <firewall>
      <family>
      <bridge>
      <filter>
      <term>
        <from>
          <interface-group>...</interface-group>
          <interface-group-except>...</interface-group-except>
          <ether-type>...</ether-type>
          <ether-type-except>...</ether-type-except>
          <vlan-ether-type>...</vlan-ether-type>
          <vlan-ether-type-except>...</vlan-ether-type-except>
          <destination-mac-address>...</destination-mac-address>
          <source-mac-address>...</source-mac-address>
          <forwarding-class>...</forwarding-class>
          <forwarding-class-except>...</forwarding-class-except>
          <loss-priority>...</loss-priority>
          <loss-priority-except>...</loss-priority-except>
          <learn-vlan-id>...</learn-vlan-id>
          <learn-vlan-id-except>...</learn-vlan-id-except>
          <learn-vlan-1p-priority>...</learn-vlan-1p-priority>
          <learn-vlan-1p-priority-except>...</learn-vlan-1p-priority-except>
          <user-vlan-id>...</user-vlan-id>
          <user-vlan-id-except>...</user-vlan-id-except>
          <user-vlan-1p-priority>...</user-vlan-1p-priority>
          <user-vlan-1p-priority-except>...</user-vlan-1p-priority-except>
          <traffic-type>...</traffic-type>
          <traffic-type-except>...</traffic-type-except>
          <ip-source-address>...</ip-source-address>
          <ip-destination-address>...</ip-destination-address>
          <ip-address>...</ip-address>
          <ip-protocol>...</ip-protocol>
          <ip-protocol-except>...</ip-protocol-except>
          <dscp>...</dscp>
          <dscp-except>...</dscp-except>
          <ip-precedence>...</ip-precedence>
          <ip-precedence-except>...</ip-precedence-except>
          <source-port>...</source-port>
          <source-port-except>...</source-port-except>
          <destination-port>...</destination-port>
          <destination-port-except>...</destination-port-except>
          <port>...</port>
          <port-except>...</port-except>
          <tcp-flags>tcp-flags</tcp-flags>
          <icmp-type>...</icmp-type>
          <icmp-type-except>...</icmp-type-except>
          <icmp-code>...</icmp-code>
          <icmp-code-except>...</icmp-code-except>
        </from>
      </term>
    </filter>

```

```

        </bridge>
    </family>
</firewall>
</configuration>

```

Description Define match criteria.

Contents

- <destination-mac-address>—Destination MAC address.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <ether-type>—Match Ethernet type.
- <ether-type-except>—Do not match Ethernet type.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.
- <icmp-type-except>—Do not match ICMP message type.
- <interface-group>—Match interface group.
- <interface-group-except>—Do not match interface group.
- <ip-address>—Match IP source or destination address.
- <ip-destination-address>—Match IP destination address.
- <ip-precedence>—Match IP precedence value.
- <ip-precedence-except>—Do not match IP precedence value.
- <ip-protocol>—Match IP protocol type.
- <ip-protocol-except>—Do not match IP protocol type.
- <ip-source-address>—Match IP source address.
- <learn-vlan-1p-priority>—Match Learned 802.1p VLAN Priority.
- <learn-vlan-1p-priority-except>—Do not match Learned 802.1p VLAN Priority.
- <learn-vlan-id>—Match Learnt VLAN ID.

<learn-vlan-id-except>—Do not match Learnt VLAN ID.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<source-mac-address>—Source MAC address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<tcp-flags>—Match TCP flags.

<traffic-type>—Match Match traffic type.

<traffic-type-except>—Do not match Match traffic type.

<user-vlan-1p-priority>—Match User 802.1p VLAN Priority.

<user-vlan-1p-priority-except>—Do not match User 802.1p VLAN Priority.

<user-vlan-id>—Match User VLAN ID.

<user-vlan-id-except>—Do not match User VLAN ID.

<vlan-ether-type>—Match VLAN Ethernet type.

<vlan-ether-type-except>—Do not match VLAN Ethernet type.

<from> (configuration/firewall/family/ccc/filter/term)

Usage <configuration>
 <firewall>
 <family>
 <ccc>
 <filter>
 <term>
 <from>
 <interface-group>...</interface-group>
 <interface-group-except>...</interface-group-except>
 <forwarding-class>...</forwarding-class>
 <forwarding-class-except>...</forwarding-class-except>
 <loss-priority>...</loss-priority>
 <loss-priority-except>...</loss-priority-except>
 </from>
 </term>
 </filter>
 </ccc>
 </family>
 </firewall>
</configuration>

Description Define match criteria.

Contents <forwarding-class>—Match forwarding class.
 <forwarding-class-except>—Do not match forwarding class.
 <interface-group>—Match interface group.
 <interface-group-except>—Do not match interface group.
 <loss-priority>—Match Loss Priority.
 <loss-priority-except>—Do not match Loss Priority.

<from> (configuration/firewall/family/ethernet-switching/filter/term)

```

Usage <configuration>
      <firewall>
      <family>
      <ethernet-switching>
      <filter>
      <term>
        <from>
          <interface>...</interface>
          <source-mac-address>...</source-mac-address>
          <destination-mac-address>...</destination-mac-address>
          <ether-type>...</ether-type>
          <ether-type-except>...</ether-type-except>
          <vlan>...</vlan>
          <vlan-except>...</vlan-except>
          <dot1q-tag>...</dot1q-tag>
          <dot1q-tag-except>...</dot1q-tag-except>
          <dot1q-user-priority>...</dot1q-user-priority>
          <dot1q-user-priority-except>...</dot1q-user-priority-except>
          <address>...</address>
          <source-address>...</source-address>
          <destination-address>...</destination-address>
          <dscp>...</dscp>
          <dscp-except>...</dscp-except>
          <precedence>...</precedence>
          <precedence-except>...</precedence-except>
          <ip-options>...</ip-options>
          <ip-options-except>...</ip-options-except>
          <fragment-flags>fragment-flags</fragment-flags>
          <is-fragment/>
          <protocol>...</protocol>
          <protocol-except>...</protocol-except>
          <source-port>...</source-port>
          <source-port-except>...</source-port-except>
          <destination-port>...</destination-port>
          <destination-port-except>...</destination-port-except>
          <port>...</port>
          <port-except>...</port-except>
          <tcp-flags>tcp-flags</tcp-flags>
          <tcp-initial/>
          <tcp-established/>
          <icmp-type>...</icmp-type>
          <icmp-type-except>...</icmp-type-except>
          <icmp-code>...</icmp-code>
          <icmp-code-except>...</icmp-code-except>
        </from>
      </term>
    </filter>
  </ethernet-switching>
</family>
</firewall>
</configuration>

```

Description Define match criteria.

Contents

- <address>—Match IP source or destination address.
- <destination-address>—Match IP destination address.
- <destination-mac-address>—Match MAC destination address.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <dot1q-tag>—Match Dot1Q Tag Value.
- <dot1q-tag-except>—Do not match Dot1Q Tag Value.
- <dot1q-user-priority>—Match Dot1Q user priority.
- <dot1q-user-priority-except>—Do not match Dot1Q user priority.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <ether-type>—Match Ethernet Type.
- <ether-type-except>—Do not match Ethernet Type.
- <fragment-flags>—Match fragment flags (in symbolic or hex formats) - (Ingress only).
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.
- <icmp-type-except>—Do not match ICMP message type.
- <interface>—Match interface name.
- <ip-options>—Match IP options.
- <ip-options-except>—Do not match IP options.
- <is-fragment>—Match if packet is a fragment.
- <port>—Match TCP/UDP source or destination port.
- <port-except>—Do not match TCP/UDP source or destination port.
- <precedence>—Match IP precedence value.
- <precedence-except>—Do not match IP precedence value.
- <protocol>—Match IP protocol type.

<protocol-except>—Do not match IP protocol type.

<source-address>—Match IP source address.

<source-mac-address>—Match MAC source address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<tcp-established>—Match packet of an established TCP connection.

<tcp-flags>—Match TCP flags (in symbolic or hex formats) - (Ingress only).

<tcp-initial>—Match initial packet of a TCP connection - (Ingress only).

<vlan>—Match Vlan Id or Name.

<vlan-except>—Do not match Vlan Id or Name.

<from> (configuration/firewall/family/inet/filter/term)

```

Usage  <configuration>
      <firewall>
      <family>
      <inet>
      <filter>
      <term>
      <from>
        <destination-class>...</destination-class>
        <destination-class-except>...</destination-class-except>
        <source-class>...</source-class>
        <source-class-except>...</source-class-except>
        <interface-group>...</interface-group>
        <interface-group-except>...</interface-group-except>
        <source-address>...</source-address>
        <destination-address>...</destination-address>
        <address>...</address>
        <source-prefix-list>...</source-prefix-list>
        <destination-prefix-list>...</destination-prefix-list>
        <prefix-list>...</prefix-list>
        <packet-length>...</packet-length>
        <packet-length-except>...</packet-length-except>
        <precedence>...</precedence>
        <precedence-except>...</precedence-except>
        <dscp>...</dscp>
        <dscp-except>...</dscp-except>
        <ip-options>...</ip-options>
        <ip-options-except>...</ip-options-except>
        <is-fragment/>
        <first-fragment/>
        <fragment-offset>...</fragment-offset>
        <fragment-offset-except>...</fragment-offset-except>
        <fragment-flags>fragment-flags</fragment-flags>
        <protocol>...</protocol>
        <protocol-except>...</protocol-except>
        <ttl>...</ttl>
        <ttl-except>...</ttl-except>
        <icmp-type>...</icmp-type>
        <icmp-type-except>...</icmp-type-except>
        <icmp-code>...</icmp-code>
        <icmp-code-except>...</icmp-code-except>
        <source-port>...</source-port>
        <source-port-except>...</source-port-except>
        <destination-port>...</destination-port>
        <destination-port-except>...</destination-port-except>
        <port>...</port>
        <port-except>...</port-except>
        <tcp-initial/>
        <tcp-established/>
        <tcp-flags>tcp-flags</tcp-flags>
        <esp-spi>...</esp-spi>
        <esp-spi-except>...</esp-spi-except>
        <ah-spi>...</ah-spi>

```

```

        <ah-spi-except>...</ah-spi-except>
        <interface>...</interface>
        <interface-set>...</interface-set>
        <forwarding-class>...</forwarding-class>
        <forwarding-class-except>...</forwarding-class-except>
        <loss-priority>...</loss-priority>
        <loss-priority-except>...</loss-priority-except>
    </from>
</term>
</filter>
</inet>
</family>
</firewall>
</configuration>

```

Description Define match criteria.

Contents

- <address>—Match IP source or destination address.
- <ah-spi>—Match IPSec AH SPI value.
- <ah-spi-except>—Do not match IPSec AH SPI value.
- <destination-address>—Match IP destination address.
- <destination-class>—Match destination class.
- <destination-class-except>—Do not match destination class.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <destination-prefix-list>—Match IP destination prefixes in named list.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <esp-spi>—Match IPSec ESP SPI value.
- <esp-spi-except>—Do not match IPSec ESP SPI value.
- <first-fragment>—Match if packet is the first fragment.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <fragment-flags>—Match fragment flags (in symbolic or hex formats).
- <fragment-offset>—Match fragment offset.
- <fragment-offset-except>—Do not match fragment offset.

`<icmp-code>`—Match ICMP message code.
`<icmp-code-except>`—Do not match ICMP message code.
`<icmp-type>`—Match ICMP message type.
`<icmp-type-except>`—Do not match ICMP message type.
`<interface>`—Match interface name.
`<interface-group>`—Match interface group.
`<interface-group-except>`—Do not match interface group.
`<interface-set>`—Match interface in set.
`<ip-options>`—Match IP options.
`<ip-options-except>`—Do not match IP options.
`<is-fragment>`—Match if packet is a fragment.
`<loss-priority>`—Match Loss Priority.
`<loss-priority-except>`—Do not match Loss Priority.
`<packet-length>`—Match packet length.
`<packet-length-except>`—Do not match packet length.
`<port>`—Match TCP/UDP source or destination port.
`<port-except>`—Do not match TCP/UDP source or destination port.
`<precedence>`—Match IP precedence value.
`<precedence-except>`—Do not match IP precedence value.
`<prefix-list>`—Match IP source or destination prefixes in named list.
`<protocol>`—Match IP protocol type.
`<protocol-except>`—Do not match IP protocol type.
`<source-address>`—Match IP source address.
`<source-class>`—Match source class.
`<source-class-except>`—Do not match source class.
`<source-port>`—Match TCP/UDP source port.
`<source-port-except>`—Do not match TCP/UDP source port.
`<source-prefix-list>`—Match IP source prefixes in named list.

`<tcp-established>`—Match packet of an established TCP connection.

`<tcp-flags>`—Match TCP flags (in symbolic or hex formats).

`<tcp-initial>`—Match initial packet of a TCP connection.

`<ttl>`—Match IP ttl type.

`<ttl-except>`—Do not match IP ttl type.

<from> (configuration/firewall/family/inet/service-filter/term)

```

Usage  <configuration>
      <firewall>
      <family>
      <inet>
      <service-filter>
      <term>
        <from>
          <interface-group>...</interface-group>
          <interface-group-except>...</interface-group-except>
          <source-address>...</source-address>
          <destination-address>...</destination-address>
          <address>...</address>
          <source-prefix-list>...</source-prefix-list>
          <destination-prefix-list>...</destination-prefix-list>
          <prefix-list>...</prefix-list>
          <protocol>...</protocol>
          <protocol-except>...</protocol-except>
          <ip-options>...</ip-options>
          <ip-options-except>...</ip-options-except>
          <source-port>...</source-port>
          <source-port-except>...</source-port-except>
          <destination-port>...</destination-port>
          <destination-port-except>...</destination-port-except>
          <port>...</port>
          <port-except>...</port-except>
          <esp-spi>...</esp-spi>
          <esp-spi-except>...</esp-spi-except>
          <is-fragment/>
          <first-fragment/>
          <fragment-offset>...</fragment-offset>
          <fragment-offset-except>...</fragment-offset-except>
          <fragment-flags>fragment-flags</fragment-flags>
          <ah-spi>...</ah-spi>
          <ah-spi-except>...</ah-spi-except>
          <loss-priority>...</loss-priority>
          <loss-priority-except>...</loss-priority-except>
        </from>
      </term>
    </service-filter>
  </inet>
</family>
</firewall>
</configuration>

```

Description Match criteria.

Contents <address>—Match IP source or destination address.

<ah-spi>—Match IPsec AH SPI value.

<ah-spi-except>—Do not match IPsec AH SPI value.

<destination-address>—Match IP destination address.

<destination-port>—Match TCP/UDP destination port.

<destination-port-except>—Do not match TCP/UDP destination port.

<destination-prefix-list>—Match IP destination prefixes in named list.

<esp-spi>—Match IPSec ESP SPI value.

<esp-spi-except>—Do not match IPSec ESP SPI value.

<first-fragment>—Match if packet is the first fragment.

<fragment-flags>—Match fragment flags.

<fragment-offset>—Match fragment offset.

<fragment-offset-except>—Do not match fragment offset.

<interface-group>—Match interface group.

<interface-group-except>—Do not match interface group.

<ip-options>—Match IP options.

<ip-options-except>—Do not match IP options.

<is-fragment>—Match if packet is a fragment.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<prefix-list>—Match IP source or destination prefixes in named list.

<protocol>—Match IP protocol type.

<protocol-except>—Do not match IP protocol type.

<source-address>—Match IP source address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<source-prefix-list>—Match IP source prefixes in named list.

<from> (configuration/firewall/family/inet/simple-filter/term)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <simple-filter>
 <term>
 <from>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <protocol>...</protocol>
 <source-port>...</source-port>
 <destination-port>...</destination-port>
 <forwarding-class>...</forwarding-class>
 </from>
 </term>
 </simple-filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Match criteria.

Contents <destination-address>—Destination IP address.

<destination-port>—Match TCP/UDP destination port.

<forwarding-class>—Match forwarding class.

<protocol>—Match IP protocol type.

<source-address>—Source IP address.

<source-port>—Match TCP/UDP source port.

<from> (configuration/firewall/family/inet6/filter/term)

```

Usage  <configuration>
      <firewall>
      <family>
      <inet6>
      <filter>
      <term>
        <from>
          <destination-class>...</destination-class>
          <destination-class-except>...</destination-class-except>
          <source-class>...</source-class>
          <source-class-except>...</source-class-except>
          <interface-group>...</interface-group>
          <interface-group-except>...</interface-group-except>
          <source-address>...</source-address>
          <destination-address>...</destination-address>
          <address>...</address>
          <source-prefix-list>...</source-prefix-list>
          <destination-prefix-list>...</destination-prefix-list>
          <prefix-list>...</prefix-list>
          <next-header>...</next-header>
          <next-header-except>...</next-header-except>
          <source-port>...</source-port>
          <source-port-except>...</source-port-except>
          <destination-port>...</destination-port>
          <destination-port-except>...</destination-port-except>
          <port>...</port>
          <port-except>...</port-except>
          <packet-length>...</packet-length>
          <packet-length-except>...</packet-length-except>
          <traffic-class>...</traffic-class>
          <traffic-class-except>...</traffic-class-except>
          <icmp-type>...</icmp-type>
          <icmp-type-except>...</icmp-type-except>
          <icmp-code>...</icmp-code>
          <icmp-code-except>...</icmp-code-except>
          <tcp-initial/>
          <tcp-established/>
          <tcp-flags>tcp-flags</tcp-flags>
          <interface>...</interface>
          <interface-set>...</interface-set>
          <forwarding-class>...</forwarding-class>
          <forwarding-class-except>...</forwarding-class-except>
          <loss-priority>...</loss-priority>
          <loss-priority-except>...</loss-priority-except>
        </from>
      </term>
    </filter>
  </inet6>
</family>
</firewall>
</configuration>

```

Description Define match criteria.

Contents

- <address>—Match source or destination address.
- <destination-address>—Match destination address.
- <destination-class>—Match destination class.
- <destination-class-except>—Do not match destination class.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <destination-prefix-list>—Match destination prefixes in named list.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.
- <icmp-type-except>—Do not match ICMP message type.
- <interface>—Match interface name.
- <interface-group>—Match interface group.
- <interface-group-except>—Do not match interface group.
- <interface-set>—Match interface in set.
- <loss-priority>—Match Loss Priority.
- <loss-priority-except>—Do not match Loss Priority.
- <next-header>—Match IP protocol type.
- <next-header-except>—Do not match IP protocol type.
- <packet-length>—Match packet length.
- <packet-length-except>—Do not match packet length.
- <port>—Match TCP/UDP source or destination port.
- <port-except>—Do not match TCP/UDP source or destination port.
- <prefix-list>—Match source or destination prefixes in named list.
- <source-address>—Match source address.

<source-class>—Match source class.

<source-class-except>—Do not match source class.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<source-prefix-list>—Match source prefixes in named list.

<tcp-established>—Match packet of an established TCP connection.

<tcp-flags>—Match TCP flags (in symbolic or hex formats).

<tcp-initial>—Match initial packet of a TCP connection.

<traffic-class>—Match Differentiated Services (DiffServ) code point.

<traffic-class-except>—Do not match Differentiated Services (DiffServ) code point.

<from> (configuration/firewall/family/inet6/service-filter/term)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <service-filter>
 <term>
 <from>
 <interface-group>...</interface-group>
 <interface-group-except>...</interface-group-except>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <address>...</address>
 <source-prefix-list>...</source-prefix-list>
 <destination-prefix-list>...</destination-prefix-list>
 <prefix-list>...</prefix-list>
 <next-header>...</next-header>
 <next-header-except>...</next-header-except>
 <source-port>...</source-port>
 <source-port-except>...</source-port-except>
 <destination-port>...</destination-port>
 <destination-port-except>...</destination-port-except>
 <port>...</port>
 <port-except>...</port-except>
 <esp-spi>...</esp-spi>
 <esp-spi-except>...</esp-spi-except>
 <ah-spi>...</ah-spi>
 <ah-spi-except>...</ah-spi-except>
 </from>
 </term>
 </service-filter>
 </inet6>
 </family>
 </firewall>
</configuration>

Description Match criteria.

Contents <address>—Match source or destination address.
 <ah-spi>—Match IPsec AH SPI value.
 <ah-spi-except>—Do not match IPsec AH SPI value.
 <destination-address>—Match destination address.
 <destination-port>—Match TCP/UDP destination port.
 <destination-port-except>—Do not match TCP/UDP destination port.
 <destination-prefix-list>—Match destination prefixes in named list.
 <esp-spi>—Match IPsec ESP SPI value.

<esp-spi-except>—Do not match IPSec ESP SPI value.

<interface-group>—Match interface group.

<interface-group-except>—Do not match interface group.

<next-header>—Match IP protocol type.

<next-header-except>—Do not match IP protocol type.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<prefix-list>—Match source or destination prefixes in named list.

<source-address>—Match source address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<source-prefix-list>—Match source prefixes in named list.

<from> (configuration/firewall/family/mpls/filter/term)

Usage <configuration>
 <firewall>
 <family>
 <mpls>
 <filter>
 <term>
 <from>
 <exp>...</exp>
 <exp-except>...</exp-except>
 <interface>...</interface>
 <interface-set>...</interface-set>
 <forwarding-class>...</forwarding-class>
 <forwarding-class-except>...</forwarding-class-except>
 <loss-priority>...</loss-priority>
 <loss-priority-except>...</loss-priority-except>
 </from>
 </term>
 </filter>
 </mpls>
 </family>
 </firewall>
</configuration>

Description Define match criteria.

Contents <exp>—Match MPLS EXP bits.
 <exp-except>—Do not match MPLS EXP bits.
 <forwarding-class>—Match forwarding class.
 <forwarding-class-except>—Do not match forwarding class.
 <interface>—Match interface name.
 <interface-set>—Match interface in set.
 <loss-priority>—Match Loss Priority.
 <loss-priority-except>—Do not match Loss Priority.

<from> (configuration/firewall/family/vpls/filter/term)

```

Usage  <configuration>
      <firewall>
      <family>
      <vpls>
      <filter>
      <term>
        <from>
          <interface-group>...</interface-group>
          <interface-group-except>...</interface-group-except>
          <ether-type>...</ether-type>
          <ether-type-except>...</ether-type-except>
          <vlan-ether-type>...</vlan-ether-type>
          <vlan-ether-type-except>...</vlan-ether-type-except>
          <destination-mac-address>...</destination-mac-address>
          <source-mac-address>...</source-mac-address>
          <forwarding-class>...</forwarding-class>
          <forwarding-class-except>...</forwarding-class-except>
          <loss-priority>...</loss-priority>
          <loss-priority-except>...</loss-priority-except>
          <learn-vlan-id>...</learn-vlan-id>
          <learn-vlan-id-except>...</learn-vlan-id-except>
          <learn-vlan-1p-priority>...</learn-vlan-1p-priority>
          <learn-vlan-1p-priority-except>...</learn-vlan-1p-priority-except>
          <user-vlan-id>...</user-vlan-id>
          <user-vlan-id-except>...</user-vlan-id-except>
          <user-vlan-1p-priority>...</user-vlan-1p-priority>
          <user-vlan-1p-priority-except>...</user-vlan-1p-priority-except>
          <traffic-type>...</traffic-type>
          <traffic-type-except>...</traffic-type-except>
          <ip-source-address>...</ip-source-address>
          <ip-destination-address>...</ip-destination-address>
          <ip-address>...</ip-address>
          <ip-protocol>...</ip-protocol>
          <ip-protocol-except>...</ip-protocol-except>
          <dscp>...</dscp>
          <dscp-except>...</dscp-except>
          <ip-precedence>...</ip-precedence>
          <ip-precedence-except>...</ip-precedence-except>
          <source-port>...</source-port>
          <source-port-except>...</source-port-except>
          <destination-port>...</destination-port>
          <destination-port-except>...</destination-port-except>
          <port>...</port>
          <port-except>...</port-except>
          <tcp-flags>tcp-flags</tcp-flags>
          <icmp-type>...</icmp-type>
          <icmp-type-except>...</icmp-type-except>
          <icmp-code>...</icmp-code>
          <icmp-code-except>...</icmp-code-except>
        </from>
      </term>
    </filter>

```

```

        </vpls>
    </family>
</firewall>
</configuration>

```

Description Define match criteria.

Contents

- <destination-mac-address>—Destination MAC address.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <ether-type>—Match Ethernet type.
- <ether-type-except>—Do not match Ethernet type.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.
- <icmp-type-except>—Do not match ICMP message type.
- <interface-group>—Match interface group.
- <interface-group-except>—Do not match interface group.
- <ip-address>—Match IP source or destination address.
- <ip-destination-address>—Match IP destination address.
- <ip-precedence>—Match IP precedence value.
- <ip-precedence-except>—Do not match IP precedence value.
- <ip-protocol>—Match IP protocol type.
- <ip-protocol-except>—Do not match IP protocol type.
- <ip-source-address>—Match IP source address.
- <learn-vlan-1p-priority>—Match Learned 802.1p VLAN Priority.
- <learn-vlan-1p-priority-except>—Do not match Learned 802.1p VLAN Priority.
- <learn-vlan-id>—Match Learnt VLAN ID.

<learn-vlan-id-except>—Do not match Learnt VLAN ID.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<source-mac-address>—Source MAC address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<tcp-flags>—Match TCP flags.

<traffic-type>—Match Match traffic type.

<traffic-type-except>—Do not match Match traffic type.

<user-vlan-1p-priority>—Match User 802.1p VLAN Priority.

<user-vlan-1p-priority-except>—Do not match User 802.1p VLAN Priority.

<user-vlan-id>—Match User VLAN ID.

<user-vlan-id-except>—Do not match User VLAN ID.

<vlan-ether-type>—Match VLAN Ethernet type.

<vlan-ether-type-except>—Do not match VLAN Ethernet type.

<from> (configuration/firewall/filter/term)

Usage <configuration>
 <firewall>
 <filter>
 <term>
 <from>
 <destination-class>...</destination-class>
 <destination-class-except>...</destination-class-except>
 <source-class>...</source-class>
 <source-class-except>...</source-class-except>
 <interface-group>...</interface-group>
 <interface-group-except>...</interface-group-except>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <address>...</address>
 <source-prefix-list>...</source-prefix-list>
 <destination-prefix-list>...</destination-prefix-list>
 <prefix-list>...</prefix-list>
 <packet-length>...</packet-length>
 <packet-length-except>...</packet-length-except>
 <precedence>...</precedence>
 <precedence-except>...</precedence-except>
 <dscp>...</dscp>
 <dscp-except>...</dscp-except>
 <ip-options>...</ip-options>
 <ip-options-except>...</ip-options-except>
 <is-fragment/>
 <first-fragment/>
 <fragment-offset>...</fragment-offset>
 <fragment-offset-except>...</fragment-offset-except>
 <fragment-flags>*fragment-flags*</fragment-flags>
 <protocol>...</protocol>
 <protocol-except>...</protocol-except>
 <ttl>...</ttl>
 <ttl-except>...</ttl-except>
 <icmp-type>...</icmp-type>
 <icmp-type-except>...</icmp-type-except>
 <icmp-code>...</icmp-code>
 <icmp-code-except>...</icmp-code-except>
 <source-port>...</source-port>
 <source-port-except>...</source-port-except>
 <destination-port>...</destination-port>
 <destination-port-except>...</destination-port-except>
 <port>...</port>
 <port-except>...</port-except>
 <tcp-initial/>
 <tcp-established/>
 <tcp-flags>*tcp-flags*</tcp-flags>
 <esp-spi>...</esp-spi>
 <esp-spi-except>...</esp-spi-except>
 <ah-spi>...</ah-spi>
 <ah-spi-except>...</ah-spi-except>
 <interface>...</interface>

```

        <interface-set>...</interface-set>
        <forwarding-class>...</forwarding-class>
        <forwarding-class-except>...</forwarding-class-except>
        <loss-priority>...</loss-priority>
        <loss-priority-except>...</loss-priority-except>
    </from>
</term>
</filter>
</firewall>
</configuration>

```

Description Define match criteria.

Contents

- <address>—Match IP source or destination address.
- <ah-spi>—Match IPSec AH SPI value.
- <ah-spi-except>—Do not match IPSec AH SPI value.
- <destination-address>—Match IP destination address.
- <destination-class>—Match destination class.
- <destination-class-except>—Do not match destination class.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <destination-prefix-list>—Match IP destination prefixes in named list.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <esp-spi>—Match IPSec ESP SPI value.
- <esp-spi-except>—Do not match IPSec ESP SPI value.
- <first-fragment>—Match if packet is the first fragment.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <fragment-flags>—Match fragment flags (in symbolic or hex formats).
- <fragment-offset>—Match fragment offset.
- <fragment-offset-except>—Do not match fragment offset.
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.

<icmp-type-except>—Do not match ICMP message type.
 <interface>—Match interface name.
 <interface-group>—Match interface group.
 <interface-group-except>—Do not match interface group.
 <interface-set>—Match interface in set.
 <ip-options>—Match IP options.
 <ip-options-except>—Do not match IP options.
 <is-fragment>—Match if packet is a fragment.
 <loss-priority>—Match Loss Priority.
 <loss-priority-except>—Do not match Loss Priority.
 <packet-length>—Match packet length.
 <packet-length-except>—Do not match packet length.
 <port>—Match TCP/UDP source or destination port.
 <port-except>—Do not match TCP/UDP source or destination port.
 <precedence>—Match IP precedence value.
 <precedence-except>—Do not match IP precedence value.
 <prefix-list>—Match IP source or destination prefixes in named list.
 <protocol>—Match IP protocol type.
 <protocol-except>—Do not match IP protocol type.
 <source-address>—Match IP source address.
 <source-class>—Match source class.
 <source-class-except>—Do not match source class.
 <source-port>—Match TCP/UDP source port.
 <source-port-except>—Do not match TCP/UDP source port.
 <source-prefix-list>—Match IP source prefixes in named list.
 <tcp-established>—Match packet of an established TCP connection.
 <tcp-flags>—Match TCP flags (in symbolic or hex formats).
 <tcp-initial>—Match initial packet of a TCP connection.

<ttl>—Match IP ttl type.

<ttl-except>—Do not match IP ttl type.

<from> (configuration/logical-systems/firewall/family/any/filter/term)

Usage

```

<configuration>
  <logical-systems>
    <firewall>
      <family>
        <any>
          <filter>
            <term>
              <from>
                <interface>...</interface>
                <interface-set>...</interface-set>
                <packet-length>...</packet-length>
                <packet-length-except>...</packet-length-except>
                <forwarding-class>...</forwarding-class>
                <forwarding-class-except>...</forwarding-class-except>
                <loss-priority>...</loss-priority>
                <loss-priority-except>...</loss-priority-except>
              </from>
            </term>
          </filter>
        </any>
      </family>
    </firewall>
  </logical-systems>
</configuration>

```

Description Define match criteria.

Contents <forwarding-class>—Match forwarding class.

<forwarding-class-except>—Do not match forwarding class.

<interface>—Match interface name.

<interface-set>—Match interface in set.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<packet-length>—Match packet length.

<packet-length-except>—Do not match packet length.

<from> (configuration/logical-systems/firewall/family/bridge/filter/term)

```

Usage  <configuration>
      <logical-systems>
      <firewall>
      <family>
      <bridge>
      <filter>
      <term>
      <from>
        <interface-group>...</interface-group>
        <interface-group-except>...</interface-group-except>
        <ether-type>...</ether-type>
        <ether-type-except>...</ether-type-except>
        <vlan-ether-type>...</vlan-ether-type>
        <vlan-ether-type-except>...</vlan-ether-type-except>
        <destination-mac-address>...</destination-mac-address>
        <source-mac-address>...</source-mac-address>
        <forwarding-class>...</forwarding-class>
        <forwarding-class-except>...</forwarding-class-except>
        <loss-priority>...</loss-priority>
        <loss-priority-except>...</loss-priority-except>
        <learn-vlan-id>...</learn-vlan-id>
        <learn-vlan-id-except>...</learn-vlan-id-except>
        <learn-vlan-1p-priority>...</learn-vlan-1p-priority>
        <learn-vlan-1p-priority-except>...</learn-vlan-1p-priority-except>
        <user-vlan-id>...</user-vlan-id>
        <user-vlan-id-except>...</user-vlan-id-except>
        <user-vlan-1p-priority>...</user-vlan-1p-priority>
        <user-vlan-1p-priority-except>...</user-vlan-1p-priority-except>
        <traffic-type>...</traffic-type>
        <traffic-type-except>...</traffic-type-except>
        <ip-source-address>...</ip-source-address>
        <ip-destination-address>...</ip-destination-address>
        <ip-address>...</ip-address>
        <ip-protocol>...</ip-protocol>
        <ip-protocol-except>...</ip-protocol-except>
        <dscp>...</dscp>
        <dscp-except>...</dscp-except>
        <ip-precedence>...</ip-precedence>
        <ip-precedence-except>...</ip-precedence-except>
        <source-port>...</source-port>
        <source-port-except>...</source-port-except>
        <destination-port>...</destination-port>
        <destination-port-except>...</destination-port-except>
        <port>...</port>
        <port-except>...</port-except>
        <tcp-flags>tcp-flags</tcp-flags>
        <icmp-type>...</icmp-type>
        <icmp-type-except>...</icmp-type-except>
        <icmp-code>...</icmp-code>
        <icmp-code-except>...</icmp-code-except>
      </from>

```

```

        </term>
      </filter>
    </bridge>
  </family>
</firewall>
</logical-systems>
</configuration>

```

Description Define match criteria.

Contents

- <destination-mac-address>—Destination MAC address.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <ether-type>—Match Ethernet type.
- <ether-type-except>—Do not match Ethernet type.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.
- <icmp-type-except>—Do not match ICMP message type.
- <interface-group>—Match interface group.
- <interface-group-except>—Do not match interface group.
- <ip-address>—Match IP source or destination address.
- <ip-destination-address>—Match IP destination address.
- <ip-precedence>—Match IP precedence value.
- <ip-precedence-except>—Do not match IP precedence value.
- <ip-protocol>—Match IP protocol type.
- <ip-protocol-except>—Do not match IP protocol type.
- <ip-source-address>—Match IP source address.
- <learn-vlan-1p-priority>—Match Learned 802.1p VLAN Priority.

<learn-vlan-1p-priority-except>—Do not match Learned 802.1p VLAN Priority.

<learn-vlan-id>—Match Learnt VLAN ID.

<learn-vlan-id-except>—Do not match Learnt VLAN ID.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<source-mac-address>—Source MAC address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<tcp-flags>—Match TCP flags.

<traffic-type>—Match Match traffic type.

<traffic-type-except>—Do not match Match traffic type.

<user-vlan-1p-priority>—Match User 802.1p VLAN Priority.

<user-vlan-1p-priority-except>—Do not match User 802.1p VLAN Priority.

<user-vlan-id>—Match User VLAN ID.

<user-vlan-id-except>—Do not match User VLAN ID.

<vlan-ether-type>—Match VLAN Ethernet type.

<vlan-ether-type-except>—Do not match VLAN Ethernet type.

<from> (configuration/logical-systems/firewall/family/ccc/filter/term)

Usage

```

<configuration>
  <logical-systems>
    <firewall>
      <family>
        <ccc>
          <filter>
            <term>
              <from>
                <interface-group>...</interface-group>
                <interface-group-except>...</interface-group-except>
                <forwarding-class>...</forwarding-class>
                <forwarding-class-except>...</forwarding-class-except>
                <loss-priority>...</loss-priority>
                <loss-priority-except>...</loss-priority-except>
              </from>
            </term>
          </filter>
        </ccc>
      </family>
    </firewall>
  </logical-systems>
</configuration>

```

Description Define match criteria.

Contents <forwarding-class>—Match forwarding class.

<forwarding-class-except>—Do not match forwarding class.

<interface-group>—Match interface group.

<interface-group-except>—Do not match interface group.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<from> (configuration/logical-systems/firewall/family/ethernet-switching/filter/term)

```

Usage  <configuration>
      <logical-systems>
      <firewall>
      <family>
      <ethernet-switching>
      <filter>
      <term>
      <from>
        <interface>...</interface>
        <source-mac-address>...</source-mac-address>
        <destination-mac-address>...</destination-mac-address>
        <ether-type>...</ether-type>
        <ether-type-except>...</ether-type-except>
        <vlan>...</vlan>
        <vlan-except>...</vlan-except>
        <dot1q-tag>...</dot1q-tag>
        <dot1q-tag-except>...</dot1q-tag-except>
        <dot1q-user-priority>...</dot1q-user-priority>
        <dot1q-user-priority-except>...</dot1q-user-priority-except>
        <address>...</address>
        <source-address>...</source-address>
        <destination-address>...</destination-address>
        <dscp>...</dscp>
        <dscp-except>...</dscp-except>
        <precedence>...</precedence>
        <precedence-except>...</precedence-except>
        <ip-options>...</ip-options>
        <ip-options-except>...</ip-options-except>
        <fragment-flags>fragment-flags</fragment-flags>
        <is-fragment/>
        <protocol>...</protocol>
        <protocol-except>...</protocol-except>
        <source-port>...</source-port>
        <source-port-except>...</source-port-except>
        <destination-port>...</destination-port>
        <destination-port-except>...</destination-port-except>
        <port>...</port>
        <port-except>...</port-except>
        <tcp-flags>tcp-flags</tcp-flags>
        <tcp-initial/>
        <tcp-established/>
        <icmp-type>...</icmp-type>
        <icmp-type-except>...</icmp-type-except>
        <icmp-code>...</icmp-code>
        <icmp-code-except>...</icmp-code-except>
      </from>
    </term>
  </filter>
</ethernet-switching>
</family>
</firewall>

```

```

    </logical-systems>
  </configuration>

```

Description Define match criteria.

Contents

- `<address>`—Match IP source or destination address.
- `<destination-address>`—Match IP destination address.
- `<destination-mac-address>`—Match MAC destination address.
- `<destination-port>`—Match TCP/UDP destination port.
- `<destination-port-except>`—Do not match TCP/UDP destination port.
- `<dot1q-tag>`—Match Dot1Q Tag Value.
- `<dot1q-tag-except>`—Do not match Dot1Q Tag Value.
- `<dot1q-user-priority>`—Match Dot1Q user priority.
- `<dot1q-user-priority-except>`—Do not match Dot1Q user priority.
- `<dscp>`—Match Differentiated Services (DiffServ) code point.
- `<dscp-except>`—Do not match Differentiated Services (DiffServ) code point.
- `<ether-type>`—Match Ethernet Type.
- `<ether-type-except>`—Do not match Ethernet Type.
- `<fragment-flags>`—Match fragment flags (in symbolic or hex formats) - (Ingress only).
- `<icmp-code>`—Match ICMP message code.
- `<icmp-code-except>`—Do not match ICMP message code.
- `<icmp-type>`—Match ICMP message type.
- `<icmp-type-except>`—Do not match ICMP message type.
- `<interface>`—Match interface name.
- `<ip-options>`—Match IP options.
- `<ip-options-except>`—Do not match IP options.
- `<is-fragment>`—Match if packet is a fragment.
- `<port>`—Match TCP/UDP source or destination port.
- `<port-except>`—Do not match TCP/UDP source or destination port.
- `<precedence>`—Match IP precedence value.

<precedence-except>—Do not match IP precedence value.

<protocol>—Match IP protocol type.

<protocol-except>—Do not match IP protocol type.

<source-address>—Match IP source address.

<source-mac-address>—Match MAC source address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<tcp-established>—Match packet of an established TCP connection.

<tcp-flags>—Match TCP flags (in symbolic or hex formats) - (Ingress only).

<tcp-initial>—Match initial packet of a TCP connection - (Ingress only).

<vlan>—Match Vlan Id or Name.

<vlan-except>—Do not match Vlan Id or Name.

<from> (configuration/logical-systems/firewall/family/inet/filter/term)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <destination-class>...</destination-class>
 <destination-class-except>...</destination-class-except>
 <source-class>...</source-class>
 <source-class-except>...</source-class-except>
 <interface-group>...</interface-group>
 <interface-group-except>...</interface-group-except>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <address>...</address>
 <source-prefix-list>...</source-prefix-list>
 <destination-prefix-list>...</destination-prefix-list>
 <prefix-list>...</prefix-list>
 <packet-length>...</packet-length>
 <packet-length-except>...</packet-length-except>
 <precedence>...</precedence>
 <precedence-except>...</precedence-except>
 <dscp>...</dscp>
 <dscp-except>...</dscp-except>
 <ip-options>...</ip-options>
 <ip-options-except>...</ip-options-except>
 <is-fragment/>
 <first-fragment/>
 <fragment-offset>...</fragment-offset>
 <fragment-offset-except>...</fragment-offset-except>
 <fragment-flags>*fragment-flags*</fragment-flags>
 <protocol>...</protocol>
 <protocol-except>...</protocol-except>
 <ttl>...</ttl>
 <ttl-except>...</ttl-except>
 <icmp-type>...</icmp-type>
 <icmp-type-except>...</icmp-type-except>
 <icmp-code>...</icmp-code>
 <icmp-code-except>...</icmp-code-except>
 <source-port>...</source-port>
 <source-port-except>...</source-port-except>
 <destination-port>...</destination-port>
 <destination-port-except>...</destination-port-except>
 <port>...</port>
 <port-except>...</port-except>
 <tcp-initial/>
 <tcp-established/>
 <tcp-flags>*tcp-flags*</tcp-flags>
 <esp-spi>...</esp-spi>


```

        <esp-spi-except>...</esp-spi-except>
        <ah-spi>...</ah-spi>
        <ah-spi-except>...</ah-spi-except>
        <interface>...</interface>
        <interface-set>...</interface-set>
        <forwarding-class>...</forwarding-class>
        <forwarding-class-except>...</forwarding-class-except>
        <loss-priority>...</loss-priority>
        <loss-priority-except>...</loss-priority-except>
    </from>
</term>
</filter>
</inet>
</family>
</firewall>
</logical-systems>
</configuration>

```

Description Define match criteria.

Contents <address>—Match IP source or destination address.

<ah-spi>—Match IPsec AH SPI value.

<ah-spi-except>—Do not match IPsec AH SPI value.

<destination-address>—Match IP destination address.

<destination-class>—Match destination class.

<destination-class-except>—Do not match destination class.

<destination-port>—Match TCP/UDP destination port.

<destination-port-except>—Do not match TCP/UDP destination port.

<destination-prefix-list>—Match IP destination prefixes in named list.

<dscp>—Match Differentiated Services (DiffServ) code point.

<dscp-except>—Do not match Differentiated Services (DiffServ) code point.

<esp-spi>—Match IPsec ESP SPI value.

<esp-spi-except>—Do not match IPsec ESP SPI value.

<first-fragment>—Match if packet is the first fragment.

<forwarding-class>—Match forwarding class.

<forwarding-class-except>—Do not match forwarding class.

<fragment-flags>—Match fragment flags (in symbolic or hex formats).

<fragment-offset>—Match fragment offset.

`<fragment-offset-except>`—Do not match fragment offset.
`<icmp-code>`—Match ICMP message code.
`<icmp-code-except>`—Do not match ICMP message code.
`<icmp-type>`—Match ICMP message type.
`<icmp-type-except>`—Do not match ICMP message type.
`<interface>`—Match interface name.
`<interface-group>`—Match interface group.
`<interface-group-except>`—Do not match interface group.
`<interface-set>`—Match interface in set.
`<ip-options>`—Match IP options.
`<ip-options-except>`—Do not match IP options.
`<is-fragment>`—Match if packet is a fragment.
`<loss-priority>`—Match Loss Priority.
`<loss-priority-except>`—Do not match Loss Priority.
`<packet-length>`—Match packet length.
`<packet-length-except>`—Do not match packet length.
`<port>`—Match TCP/UDP source or destination port.
`<port-except>`—Do not match TCP/UDP source or destination port.
`<precedence>`—Match IP precedence value.
`<precedence-except>`—Do not match IP precedence value.
`<prefix-list>`—Match IP source or destination prefixes in named list.
`<protocol>`—Match IP protocol type.
`<protocol-except>`—Do not match IP protocol type.
`<source-address>`—Match IP source address.
`<source-class>`—Match source class.
`<source-class-except>`—Do not match source class.
`<source-port>`—Match TCP/UDP source port.
`<source-port-except>`—Do not match TCP/UDP source port.

`<source-prefix-list>`—Match IP source prefixes in named list.

`<tcp-established>`—Match packet of an established TCP connection.

`<tcp-flags>`—Match TCP flags (in symbolic or hex formats).

`<tcp-initial>`—Match initial packet of a TCP connection.

`<ttl>`—Match IP ttl type.

`<ttl-except>`—Do not match IP ttl type.

<from> (configuration/logical-systems/firewall/family/inet/service-filter/term)

```

Usage  <configuration>
      <logical-systems>
      <firewall>
      <family>
      <inet>
      <service-filter>
      <term>
        <from>
          <interface-group>...</interface-group>
          <interface-group-except>...</interface-group-except>
          <source-address>...</source-address>
          <destination-address>...</destination-address>
          <address>...</address>
          <source-prefix-list>...</source-prefix-list>
          <destination-prefix-list>...</destination-prefix-list>
          <prefix-list>...</prefix-list>
          <protocol>...</protocol>
          <protocol-except>...</protocol-except>
          <ip-options>...</ip-options>
          <ip-options-except>...</ip-options-except>
          <source-port>...</source-port>
          <source-port-except>...</source-port-except>
          <destination-port>...</destination-port>
          <destination-port-except>...</destination-port-except>
          <port>...</port>
          <port-except>...</port-except>
          <esp-spi>...</esp-spi>
          <esp-spi-except>...</esp-spi-except>
          <is-fragment/>
          <first-fragment/>
          <fragment-offset>...</fragment-offset>
          <fragment-offset-except>...</fragment-offset-except>
          <fragment-flags>fragment-flags</fragment-flags>
          <ah-spi>...</ah-spi>
          <ah-spi-except>...</ah-spi-except>
          <loss-priority>...</loss-priority>
          <loss-priority-except>...</loss-priority-except>
        </from>
      </term>
    </service-filter>
  </inet>
</family>
</firewall>
</logical-systems>
</configuration>

```

Description Match criteria.

Contents <address>—Match IP source or destination address.

<ah-spi>—Match IPSec AH SPI value.

<ah-spi-except>—Do not match IPSec AH SPI value.

<destination-address>—Match IP destination address.

<destination-port>—Match TCP/UDP destination port.

<destination-port-except>—Do not match TCP/UDP destination port.

<destination-prefix-list>—Match IP destination prefixes in named list.

<esp-spi>—Match IPSec ESP SPI value.

<esp-spi-except>—Do not match IPSec ESP SPI value.

<first-fragment>—Match if packet is the first fragment.

<fragment-flags>—Match fragment flags.

<fragment-offset>—Match fragment offset.

<fragment-offset-except>—Do not match fragment offset.

<interface-group>—Match interface group.

<interface-group-except>—Do not match interface group.

<ip-options>—Match IP options.

<ip-options-except>—Do not match IP options.

<is-fragment>—Match if packet is a fragment.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<prefix-list>—Match IP source or destination prefixes in named list.

<protocol>—Match IP protocol type.

<protocol-except>—Do not match IP protocol type.

<source-address>—Match IP source address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<source-prefix-list>—Match IP source prefixes in named list.

<from> (configuration/logical-systems/firewall/family/inet/simple-filter/term)

Usage

```

<configuration>
  <logical-systems>
    <firewall>
      <family>
        <inet>
          <simple-filter>
            <term>
              <from>
                <source-address>...</source-address>
                <destination-address>...</destination-address>
                <protocol>...</protocol>
                <source-port>...</source-port>
                <destination-port>...</destination-port>
                <forwarding-class>...</forwarding-class>
              </from>
            </term>
          </simple-filter>
        </inet>
      </family>
    </firewall>
  </logical-systems>
</configuration>

```

Description Match criteria.

Contents <destination-address>—Destination IP address.

<destination-port>—Match TCP/UDP destination port.

<forwarding-class>—Match forwarding class.

<protocol>—Match IP protocol type.

<source-address>—Source IP address.

<source-port>—Match TCP/UDP source port.

<from> (configuration/logical-systems/firewall/family/inet6/filter/term)

```

Usage  <configuration>
      <logical-systems>
      <firewall>
      <family>
      <inet6>
      <filter>
      <term>
      <from>
        <destination-class>...</destination-class>
        <destination-class-except>...</destination-class-except>
        <source-class>...</source-class>
        <source-class-except>...</source-class-except>
        <interface-group>...</interface-group>
        <interface-group-except>...</interface-group-except>
        <source-address>...</source-address>
        <destination-address>...</destination-address>
        <address>...</address>
        <source-prefix-list>...</source-prefix-list>
        <destination-prefix-list>...</destination-prefix-list>
        <prefix-list>...</prefix-list>
        <next-header>...</next-header>
        <next-header-except>...</next-header-except>
        <source-port>...</source-port>
        <source-port-except>...</source-port-except>
        <destination-port>...</destination-port>
        <destination-port-except>...</destination-port-except>
        <port>...</port>
        <port-except>...</port-except>
        <packet-length>...</packet-length>
        <packet-length-except>...</packet-length-except>
        <traffic-class>...</traffic-class>
        <traffic-class-except>...</traffic-class-except>
        <icmp-type>...</icmp-type>
        <icmp-type-except>...</icmp-type-except>
        <icmp-code>...</icmp-code>
        <icmp-code-except>...</icmp-code-except>
        <tcp-initial/>
        <tcp-established/>
        <tcp-flags>tcp-flags</tcp-flags>
        <interface>...</interface>
        <interface-set>...</interface-set>
        <forwarding-class>...</forwarding-class>
        <forwarding-class-except>...</forwarding-class-except>
        <loss-priority>...</loss-priority>
        <loss-priority-except>...</loss-priority-except>
      </from>
    </term>
  </filter>
</inet6>
</family>
</firewall>

```

```

    </logical-systems>
  </configuration>

```

Description Define match criteria.

Contents

- <address>—Match source or destination address.
- <destination-address>—Match destination address.
- <destination-class>—Match destination class.
- <destination-class-except>—Do not match destination class.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <destination-prefix-list>—Match destination prefixes in named list.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.
- <icmp-type-except>—Do not match ICMP message type.
- <interface>—Match interface name.
- <interface-group>—Match interface group.
- <interface-group-except>—Do not match interface group.
- <interface-set>—Match interface in set.
- <loss-priority>—Match Loss Priority.
- <loss-priority-except>—Do not match Loss Priority.
- <next-header>—Match IP protocol type.
- <next-header-except>—Do not match IP protocol type.
- <packet-length>—Match packet length.
- <packet-length-except>—Do not match packet length.
- <port>—Match TCP/UDP source or destination port.
- <port-except>—Do not match TCP/UDP source or destination port.
- <prefix-list>—Match source or destination prefixes in named list.

<source-address>—Match source address.

<source-class>—Match source class.

<source-class-except>—Do not match source class.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<source-prefix-list>—Match source prefixes in named list.

<tcp-established>—Match packet of an established TCP connection.

<tcp-flags>—Match TCP flags (in symbolic or hex formats).

<tcp-initial>—Match initial packet of a TCP connection.

<traffic-class>—Match Differentiated Services (DiffServ) code point.

<traffic-class-except>—Do not match Differentiated Services (DiffServ) code point.

<from> (configuration/logical-systems/firewall/family/inet6/service-filter/term)

Usage <configuration>
 <logical-systems>
 <firewall>
 <family>
 <inet6>
 <service-filter>
 <term>
 <from>
 <interface-group>...</interface-group>
 <interface-group-except>...</interface-group-except>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <address>...</address>
 <source-prefix-list>...</source-prefix-list>
 <destination-prefix-list>...</destination-prefix-list>
 <prefix-list>...</prefix-list>
 <next-header>...</next-header>
 <next-header-except>...</next-header-except>
 <source-port>...</source-port>
 <source-port-except>...</source-port-except>
 <destination-port>...</destination-port>
 <destination-port-except>...</destination-port-except>
 <port>...</port>
 <port-except>...</port-except>
 <esp-spi>...</esp-spi>
 <esp-spi-except>...</esp-spi-except>
 <ah-spi>...</ah-spi>
 <ah-spi-except>...</ah-spi-except>
 </from>
 </term>
 </service-filter>
 </inet6>
 </family>
 </firewall>
</logical-systems>
</configuration>

Description Match criteria.

Contents <address>—Match source or destination address.

<ah-spi>—Match IPSec AH SPI value.

<ah-spi-except>—Do not match IPSec AH SPI value.

<destination-address>—Match destination address.

<destination-port>—Match TCP/UDP destination port.

<destination-port-except>—Do not match TCP/UDP destination port.

<destination-prefix-list>—Match destination prefixes in named list.

<esp-spi>—Match IPSec ESP SPI value.

<esp-spi-except>—Do not match IPSec ESP SPI value.

<interface-group>—Match interface group.

<interface-group-except>—Do not match interface group.

<next-header>—Match IP protocol type.

<next-header-except>—Do not match IP protocol type.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<prefix-list>—Match source or destination prefixes in named list.

<source-address>—Match source address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<source-prefix-list>—Match source prefixes in named list.

<from> (configuration/logical-systems/firewall/family/mpls/filter/term)

Usage

```

<configuration>
  <logical-systems>
    <firewall>
      <family>
        <mpls>
          <filter>
            <term>
              <from>
                <exp>...</exp>
                <exp-except>...</exp-except>
                <interface>...</interface>
                <interface-set>...</interface-set>
                <forwarding-class>...</forwarding-class>
                <forwarding-class-except>...</forwarding-class-except>
                <loss-priority>...</loss-priority>
                <loss-priority-except>...</loss-priority-except>
              </from>
            </term>
          </filter>
        </mpls>
      </family>
    </firewall>
  </logical-systems>
</configuration>

```

Description Define match criteria.

Contents

- <exp>—Match MPLS EXP bits.
- <exp-except>—Do not match MPLS EXP bits.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <interface>—Match interface name.
- <interface-set>—Match interface in set.
- <loss-priority>—Match Loss Priority.
- <loss-priority-except>—Do not match Loss Priority.

<from> (configuration/logical-systems/firewall/family/vpls/filter/term)

```

Usage  <configuration>
      <logical-systems>
      <firewall>
      <family>
      <vpls>
      <filter>
      <term>
      <from>
        <interface-group>...</interface-group>
        <interface-group-except>...</interface-group-except>
        <ether-type>...</ether-type>
        <ether-type-except>...</ether-type-except>
        <vlan-ether-type>...</vlan-ether-type>
        <vlan-ether-type-except>...</vlan-ether-type-except>
        <destination-mac-address>...</destination-mac-address>
        <source-mac-address>...</source-mac-address>
        <forwarding-class>...</forwarding-class>
        <forwarding-class-except>...</forwarding-class-except>
        <loss-priority>...</loss-priority>
        <loss-priority-except>...</loss-priority-except>
        <learn-vlan-id>...</learn-vlan-id>
        <learn-vlan-id-except>...</learn-vlan-id-except>
        <learn-vlan-1p-priority>...</learn-vlan-1p-priority>
        <learn-vlan-1p-priority-except>...</learn-vlan-1p-priority-except>
        <user-vlan-id>...</user-vlan-id>
        <user-vlan-id-except>...</user-vlan-id-except>
        <user-vlan-1p-priority>...</user-vlan-1p-priority>
        <user-vlan-1p-priority-except>...</user-vlan-1p-priority-except>
        <traffic-type>...</traffic-type>
        <traffic-type-except>...</traffic-type-except>
        <ip-source-address>...</ip-source-address>
        <ip-destination-address>...</ip-destination-address>
        <ip-address>...</ip-address>
        <ip-protocol>...</ip-protocol>
        <ip-protocol-except>...</ip-protocol-except>
        <dscp>...</dscp>
        <dscp-except>...</dscp-except>
        <ip-precedence>...</ip-precedence>
        <ip-precedence-except>...</ip-precedence-except>
        <source-port>...</source-port>
        <source-port-except>...</source-port-except>
        <destination-port>...</destination-port>
        <destination-port-except>...</destination-port-except>
        <port>...</port>
        <port-except>...</port-except>
        <tcp-flags>tcp-flags</tcp-flags>
        <icmp-type>...</icmp-type>
        <icmp-type-except>...</icmp-type-except>
        <icmp-code>...</icmp-code>
        <icmp-code-except>...</icmp-code-except>
      </from>

```

```

        </term>
      </filter>
    </vpls>
  </family>
</firewall>
</logical-systems>
</configuration>

```

Description Define match criteria.

Contents

- <destination-mac-address>—Destination MAC address.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <ether-type>—Match Ethernet type.
- <ether-type-except>—Do not match Ethernet type.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <icmp-code>—Match ICMP message code.
- <icmp-code-except>—Do not match ICMP message code.
- <icmp-type>—Match ICMP message type.
- <icmp-type-except>—Do not match ICMP message type.
- <interface-group>—Match interface group.
- <interface-group-except>—Do not match interface group.
- <ip-address>—Match IP source or destination address.
- <ip-destination-address>—Match IP destination address.
- <ip-precedence>—Match IP precedence value.
- <ip-precedence-except>—Do not match IP precedence value.
- <ip-protocol>—Match IP protocol type.
- <ip-protocol-except>—Do not match IP protocol type.
- <ip-source-address>—Match IP source address.
- <learn-vlan-1p-priority>—Match Learned 802.1p VLAN Priority.

<learn-vlan-1p-priority-except>—Do not match Learned 802.1p VLAN Priority.

<learn-vlan-id>—Match Learnt VLAN ID.

<learn-vlan-id-except>—Do not match Learnt VLAN ID.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<source-mac-address>—Source MAC address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<tcp-flags>—Match TCP flags.

<traffic-type>—Match Match traffic type.

<traffic-type-except>—Do not match Match traffic type.

<user-vlan-1p-priority>—Match User 802.1p VLAN Priority.

<user-vlan-1p-priority-except>—Do not match User 802.1p VLAN Priority.

<user-vlan-id>—Match User VLAN ID.

<user-vlan-id-except>—Do not match User VLAN ID.

<vlan-ether-type>—Match VLAN Ethernet type.

<vlan-ether-type-except>—Do not match VLAN Ethernet type.

<from> (configuration/logical-systems/firewall/filter/term)

Usage <configuration>
 <logical-systems>
 <firewall>
 <filter>
 <term>
 <from>
 <destination-class>...</destination-class>
 <destination-class-except>...</destination-class-except>
 <source-class>...</source-class>
 <source-class-except>...</source-class-except>
 <interface-group>...</interface-group>
 <interface-group-except>...</interface-group-except>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <address>...</address>
 <source-prefix-list>...</source-prefix-list>
 <destination-prefix-list>...</destination-prefix-list>
 <prefix-list>...</prefix-list>
 <packet-length>...</packet-length>
 <packet-length-except>...</packet-length-except>
 <precedence>...</precedence>
 <precedence-except>...</precedence-except>
 <dscp>...</dscp>
 <dscp-except>...</dscp-except>
 <ip-options>...</ip-options>
 <ip-options-except>...</ip-options-except>
 <is-fragment/>
 <first-fragment/>
 <fragment-offset>...</fragment-offset>
 <fragment-offset-except>...</fragment-offset-except>
 <fragment-flags>*fragment-flags*</fragment-flags>
 <protocol>...</protocol>
 <protocol-except>...</protocol-except>
 <ttl>...</ttl>
 <ttl-except>...</ttl-except>
 <icmp-type>...</icmp-type>
 <icmp-type-except>...</icmp-type-except>
 <icmp-code>...</icmp-code>
 <icmp-code-except>...</icmp-code-except>
 <source-port>...</source-port>
 <source-port-except>...</source-port-except>
 <destination-port>...</destination-port>
 <destination-port-except>...</destination-port-except>
 <port>...</port>
 <port-except>...</port-except>
 <tcp-initial/>
 <tcp-established/>
 <tcp-flags>*tcp-flags*</tcp-flags>
 <esp-spi>...</esp-spi>
 <esp-spi-except>...</esp-spi-except>
 <ah-spi>...</ah-spi>
 <ah-spi-except>...</ah-spi-except>


```

<interface>...</interface>
<interface-set>...</interface-set>
<forwarding-class>...</forwarding-class>
<forwarding-class-except>...</forwarding-class-except>
<loss-priority>...</loss-priority>
<loss-priority-except>...</loss-priority-except>
</from>
</term>
</filter>
</firewall>
</logical-systems>
</configuration>

```

Description Define match criteria.

Contents

- <address>—Match IP source or destination address.
- <ah-spi>—Match IPsec AH SPI value.
- <ah-spi-except>—Do not match IPsec AH SPI value.
- <destination-address>—Match IP destination address.
- <destination-class>—Match destination class.
- <destination-class-except>—Do not match destination class.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.
- <destination-prefix-list>—Match IP destination prefixes in named list.
- <dscp>—Match Differentiated Services (DiffServ) code point.
- <dscp-except>—Do not match Differentiated Services (DiffServ) code point.
- <esp-spi>—Match IPsec ESP SPI value.
- <esp-spi-except>—Do not match IPsec ESP SPI value.
- <first-fragment>—Match if packet is the first fragment.
- <forwarding-class>—Match forwarding class.
- <forwarding-class-except>—Do not match forwarding class.
- <fragment-flags>—Match fragment flags (in symbolic or hex formats).
- <fragment-offset>—Match fragment offset.
- <fragment-offset-except>—Do not match fragment offset.
- <icmp-code>—Match ICMP message code.

<icmp-code-except>—Do not match ICMP message code.

<icmp-type>—Match ICMP message type.

<icmp-type-except>—Do not match ICMP message type.

<interface>—Match interface name.

<interface-group>—Match interface group.

<interface-group-except>—Do not match interface group.

<interface-set>—Match interface in set.

<ip-options>—Match IP options.

<ip-options-except>—Do not match IP options.

<is-fragment>—Match if packet is a fragment.

<loss-priority>—Match Loss Priority.

<loss-priority-except>—Do not match Loss Priority.

<packet-length>—Match packet length.

<packet-length-except>—Do not match packet length.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<precedence>—Match IP precedence value.

<precedence-except>—Do not match IP precedence value.

<prefix-list>—Match IP source or destination prefixes in named list.

<protocol>—Match IP protocol type.

<protocol-except>—Do not match IP protocol type.

<source-address>—Match IP source address.

<source-class>—Match source class.

<source-class-except>—Do not match source class.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<source-prefix-list>—Match IP source prefixes in named list.

<tcp-established>—Match packet of an established TCP connection.

`<tcp-flags>`—Match TCP flags (in symbolic or hex formats).

`<tcp-initial>`—Match initial packet of a TCP connection.

`<ttl>`—Match IP ttl type.

`<ttl-except>`—Do not match IP ttl type.

<from> (configuration/logical-systems/policy-options/policy-statement)

Usage <configuration>
 <logical-systems>
 <policy-options>
 <policy-statement>
 <from>
 <instance>*instance*</instance>
 <protocol>...</protocol>
 <rib>*rib*</rib>
 <neighbor>...</neighbor>
 <next-hop>...</next-hop>
 <interface>...</interface>
 <area>*area*</area>
 <as-path>...</as-path>
 <as-path-group>...</as-path-group>
 <origin>*origin-choice*</origin>
 <community>...</community>
 <level>*level*</level>
 <external>...</external>
 <metric>*metric*</metric>
 <metric2>*metric2*</metric2>
 <metric3>*metric3*</metric3>
 <metric4>*metric4*</metric4>
 <tag>...</tag>
 <tag2>*tag2*</tag2>
 <preference>*preference*</preference>
 <preference2>*preference2*</preference2>
 <color>*color*</color>
 <color2>*color2*</color2>
 <local-preference>*local-preference*</local-preference>
 <policy>...</policy>
 <family>*family-choice*</family>
 <route-filter>...</route-filter>
 <source-address-filter>...</source-address-filter>
 <prefix-list>...</prefix-list>
 <prefix-list-filter>...</prefix-list-filter>
 <multicast-scope>...</multicast-scope>
 <aggregate-contributor></aggregate-contributor>
 <state>*state-choice*</state>
 <route-type>*route-type-choice*</route-type>
 <next-hop-type>*next-hop-type-choice*</next-hop-type>
 <condition>...</condition>
 </from>
 </policy-statement>
</policy-options>
</logical-systems>
</configuration>

Description Conditions to match the source of a route.

Contents <aggregate-contributor>—Match more specifics of an aggregate.

<area>—OSPF area identifier.

<as-path>—Name of AS path regular expression (BGP only).

<as-path-group>—Name of AS path group (BGP only).

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community.

<condition>—Condition to match on.

<external>—External route.

<family>—No documentation is available yet.

- inet—IPv4 family.
- inet-mvpn—IPv4 Multicast VPN family.
- inet6—IPv6 family.
- inet6-mvpn—IPv6 Multicast VPN family.
- iso—ISO family.

<instance>—Routing protocol instance.

<interface>—Interface name or address.

<level>—IS-IS level.

<local-preference>—Local preference associated with a route.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<multicast-scope>—Multicast scope to match.

<neighbor>—Neighboring router.

<next-hop>—Next-hop router.

<next-hop-type>—Next-hop type.

- merged—Merged next hop.

<origin>—BGP origin attribute.

- **egp**—Path originated in another AS.
 - **igp**—Path originated in the local IGP.
 - **incomplete**—Path was learned by some other means.
- <policy>**—Name of policy to evaluate.
- <preference>**—Preference value.
- <preference2>**—Preference value 2.
- <prefix-list>**—List of prefix-lists of routes to match.
- <prefix-list-filter>**—List of prefix-list-filters to match.
- <protocol>**—Protocol from which route was learned.
- <rib>**—Routing table.
- <route-filter>**—List of routes to match.
- <route-type>**—Route type.
- **external**—External route.
 - **internal**—Internal route.
- <source-address-filter>**—List of source addresses to match.
- <state>**—Route state.
- **active**—Active route.
 - **inactive**—Inactive route.
- <tag>**—Tag string.
- <tag2>**—Tag string 2.

<from> (configuration/logical-systems/policy-options/policy-statement/term)

Usage <configuration>
 <logical-systems>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <instance>*instance*</instance>
 <protocol>...</protocol>
 <rib>*rib*</rib>
 <neighbor>...</neighbor>
 <next-hop>...</next-hop>
 <interface>...</interface>
 <area>*area*</area>
 <as-path>...</as-path>
 <as-path-group>...</as-path-group>
 <origin>*origin-choice*</origin>
 <community>...</community>
 <level>*level*</level>
 <external>...</external>
 <metric>*metric*</metric>
 <metric2>*metric2*</metric2>
 <metric3>*metric3*</metric3>
 <metric4>*metric4*</metric4>
 <tag>...</tag>
 <tag2>*tag2*</tag2>
 <preference>*preference*</preference>
 <preference2>*preference2*</preference2>
 <color>*color*</color>
 <color2>*color2*</color2>
 <local-preference>*local-preference*</local-preference>
 <policy>...</policy>
 <family>*family-choice*</family>
 <route-filter>...</route-filter>
 <source-address-filter>...</source-address-filter>
 <prefix-list>...</prefix-list>
 <prefix-list-filter>...</prefix-list-filter>
 <multicast-scope>...</multicast-scope>
 <aggregate-contributor>
 <state>*state-choice*</state>
 <route-type>*route-type-choice*</route-type>
 <next-hop-type>*next-hop-type-choice*</next-hop-type>
 <condition>...</condition>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </logical-systems>
 </configuration>

Description Conditions to match the source of a route.

Contents	<p><aggregate-contributor>—Match more specifics of an aggregate.</p> <p><area>—OSPF area identifier.</p> <p><as-path>—Name of AS path regular expression (BGP only).</p> <p><as-path-group>—Name of AS path group (BGP only).</p> <p><color>—Color (preference) value.</p> <p><color2>—Color (preference) value 2.</p> <p><community>—BGP community.</p> <p><condition>—Condition to match on.</p> <p><external>—External route.</p> <p><family>—No documentation is available yet.</p> <ul style="list-style-type: none"> ■ inet—IPv4 family. ■ inet-mvpn—IPv4 Multicast VPN family. ■ inet6—IPv6 family. ■ inet6-mvpn—IPv6 Multicast VPN family. ■ iso—ISO family. <p><instance>—Routing protocol instance.</p> <p><interface>—Interface name or address.</p> <p><level>—IS-IS level.</p> <p><local-preference>—Local preference associated with a route.</p> <p><metric>—Metric value.</p> <p><metric2>—Metric value 2.</p> <p><metric3>—Metric value 3.</p> <p><metric4>—Metric value 4.</p> <p><multicast-scope>—Multicast scope to match.</p> <p><neighbor>—Neighboring router.</p> <p><next-hop>—Next-hop router.</p> <p><next-hop-type>—Next-hop type.</p> <ul style="list-style-type: none"> ■ merged—Merged next hop.
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<origin>—BGP origin attribute.

- **egp**—Path originated in another AS.
- **igp**—Path originated in the local IGP.
- **incomplete**—Path was learned by some other means.

<policy>—Name of policy to evaluate.

<preference>—Preference value.

<preference2>—Preference value 2.

<prefix-list>—List of prefix-lists of routes to match.

<prefix-list-filter>—List of prefix-list-filters to match.

<protocol>—Protocol from which route was learned.

<rib>—Routing table.

<route-filter>—List of routes to match.

<route-type>—Route type.

- **external**—External route.
 - **internal**—Internal route.
- <source-address-filter>—List of source addresses to match.

<state>—Route state.

- **active**—Active route.
- **inactive**—Inactive route.

<tag>—Tag string.

<tag2>—Tag string 2.

<from> (configuration/logical-systems/routing-instances/instance/routing-options/fate-sharing/group)

Usage <configuration>
 <logical-systems>
 <routing-instances>
 <instance>
 <routing-options>
 <fate-sharing>
 <group>
 <from>
 <name>*name*</name> <!-- identifier -->
 <to>*to*</to>
 </from>
 </group>
 </fate-sharing>
 </routing-options>
 </instance>
 </routing-instances>
 </logical-systems>
</configuration>

Description No documentation is available yet.

Contents <name>—Router ID or LAN interface address.

<to>—Point-to-point links.

<from> (configuration/logical-systems/routing-options/fate-sharing/group)

Usage <configuration>
 <logical-systems>
 <routing-options>
 <fate-sharing>
 <group>
 <from>
 <name>*name*</name> <!-- identifier -->
 <to>*to*</to>
 </from>
 </group>
 </fate-sharing>
 </routing-options>
 </logical-systems>
</configuration>

Description No documentation is available yet.

Contents <name>—Router ID or LAN interface address.

<to>—Point-to-point links.

<from> (configuration/policy-options/policy-statement)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <instance>*instance*</instance>
 <protocol>...</protocol>
 <rib>*rib*</rib>
 <neighbor>...</neighbor>
 <next-hop>...</next-hop>
 <interface>...</interface>
 <area>*area*</area>
 <as-path>...</as-path>
 <as-path-group>...</as-path-group>
 <origin>*origin-choice*</origin>
 <community>...</community>
 <level>*level*</level>
 <external>...</external>
 <metric>*metric*</metric>
 <metric2>*metric2*</metric2>
 <metric3>*metric3*</metric3>
 <metric4>*metric4*</metric4>
 <tag>...</tag>
 <tag2>*tag2*</tag2>
 <preference>*preference*</preference>
 <preference2>*preference2*</preference2>
 <color>*color*</color>
 <color2>*color2*</color2>
 <local-preference>*local-preference*</local-preference>
 <policy>...</policy>
 <family>*family-choice*</family>
 <route-filter>...</route-filter>
 <source-address-filter>...</source-address-filter>
 <prefix-list>...</prefix-list>
 <prefix-list-filter>...</prefix-list-filter>
 <multicast-scope>...</multicast-scope>
 <aggregate-contributor/>
 <state>*state-choice*</state>
 <route-type>*route-type-choice*</route-type>
 <next-hop-type>*next-hop-type-choice*</next-hop-type>
 <condition>...</condition>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Conditions to match the source of a route.

Contents <aggregate-contributor>—Match more specifics of an aggregate.

<area>—OSPF area identifier.

<as-path>—Name of AS path regular expression (BGP only).

<as-path-group>—Name of AS path group (BGP only).

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community.

<condition>—Condition to match on.

<external>—External route.

<family>—No documentation is available yet.

- inet—IPv4 family.
- inet-mvpn—IPv4 Multicast VPN family.
- inet6—IPv6 family.
- inet6-mvpn—IPv6 Multicast VPN family.
- iso—ISO family.

<instance>—Routing protocol instance.

<interface>—Interface name or address.

<level>—IS-IS level.

<local-preference>—Local preference associated with a route.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<multicast-scope>—Multicast scope to match.

<neighbor>—Neighboring router.

<next-hop>—Next-hop router.

<next-hop-type>—Next-hop type.

- merged—Merged next hop.
- <origin>—BGP origin attribute.
- egp—Path originated in another AS.
 - igp—Path originated in the local IGP.

- **incomplete**—Path was learned by some other means.

<policy>—Name of policy to evaluate.

<preference>—Preference value.

<preference2>—Preference value 2.

<prefix-list>—List of prefix-lists of routes to match.

<prefix-list-filter>—List of prefix-list-filters to match.

<protocol>—Protocol from which route was learned.

<rib>—Routing table.

<route-filter>—List of routes to match.

<route-type>—Route type.

- **external**—External route.

- **internal**—Internal route.

<source-address-filter>—List of source addresses to match.

<state>—Route state.

- **active**—Active route.

- **inactive**—Inactive route.

<tag>—Tag string.

<tag2>—Tag string 2.

<from> (configuration/policy-options/policy-statement/term)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <instance>*instance*</instance>
 <protocol>...</protocol>
 <rib>*rib*</rib>
 <neighbor>...</neighbor>
 <next-hop>...</next-hop>
 <interface>...</interface>
 <area>*area*</area>
 <as-path>...</as-path>
 <as-path-group>...</as-path-group>
 <origin>*origin-choice*</origin>
 <community>...</community>
 <level>*level*</level>
 <external>...</external>
 <metric>*metric*</metric>
 <metric2>*metric2*</metric2>
 <metric3>*metric3*</metric3>
 <metric4>*metric4*</metric4>
 <tag>...</tag>
 <tag2>*tag2*</tag2>
 <preference>*preference*</preference>
 <preference2>*preference2*</preference2>
 <color>*color*</color>
 <color2>*color2*</color2>
 <local-preference>*local-preference*</local-preference>
 <policy>...</policy>
 <family>*family-choice*</family>
 <route-filter>...</route-filter>
 <source-address-filter>...</source-address-filter>
 <prefix-list>...</prefix-list>
 <prefix-list-filter>...</prefix-list-filter>
 <multicast-scope>...</multicast-scope>
 <aggregate-contributor/>
 <state>*state-choice*</state>
 <route-type>*route-type-choice*</route-type>
 <next-hop-type>*next-hop-type-choice*</next-hop-type>
 <condition>...</condition>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Conditions to match the source of a route.

Contents <aggregate-contributor>—Match more specifics of an aggregate.
 <area>—OSPF area identifier.

<as-path>—Name of AS path regular expression (BGP only).

<as-path-group>—Name of AS path group (BGP only).

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community.

<condition>—Condition to match on.

<external>—External route.

<family>—No documentation is available yet.

- inet—IPv4 family.
- inet-mvpn—IPv4 Multicast VPN family.
- inet6—IPv6 family.
- inet6-mvpn—IPv6 Multicast VPN family.
- iso—ISO family.

<instance>—Routing protocol instance.

<interface>—Interface name or address.

<level>—IS-IS level.

<local-preference>—Local preference associated with a route.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<multicast-scope>—Multicast scope to match.

<neighbor>—Neighboring router.

<next-hop>—Next-hop router.

<next-hop-type>—Next-hop type.

- merged—Merged next hop.

<origin>—BGP origin attribute.

- egp—Path originated in another AS.

- `igp`—Path originated in the local IGP.
 - `incomplete`—Path was learned by some other means.
- `<policy>`—Name of policy to evaluate.
- `<preference>`—Preference value.
- `<preference2>`—Preference value 2.
- `<prefix-list>`—List of prefix-lists of routes to match.
- `<prefix-list-filter>`—List of prefix-list-filters to match.
- `<protocol>`—Protocol from which route was learned.
- `<rib>`—Routing table.
- `<route-filter>`—List of routes to match.
- `<route-type>`—Route type.
- `external`—External route.
 - `internal`—Internal route.
- `<source-address-filter>`—List of source addresses to match.
- `<state>`—Route state.
- `active`—Active route.
 - `inactive`—Inactive route.
- `<tag>`—Tag string.
- `<tag2>`—Tag string 2.

<from> (configuration/routing-instances/instance/routing-options/fate-sharing/group)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <fate-sharing>
 <group>
 <from>
 <name>name</name> <!-- identifier -->
 <to>to</to>
 </from>
 </group>
 </fate-sharing>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description No documentation is available yet.

Contents <name>—Router ID or LAN interface address.
 <to>—Point-to-point links.

<from> (configuration/routing-options/fate-sharing/group)

Usage <configuration>
 <routing-options>
 <fate-sharing>
 <group>
 <from>
 <name>name</name> <!-- identifier -->
 <to>to</to>
 </from>
 </group>
 </fate-sharing>
 </routing-options>
 </configuration>

Description No documentation is available yet.

Contents <name>—Router ID or LAN interface address.
 <to>—Point-to-point links.

<from> (configuration/services/cos/rule/term)

Usage <configuration>
 <services>
 <cos>
 <rule>
 <term>
 <from>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <source-address-range>...</source-address-range>
 <source-prefix-list>...</source-prefix-list>
 <destination-address-range>...</destination-address-range>
 <destination-prefix-list>...</destination-prefix-list>
 <applications>...</applications>
 <application-sets>...</application-sets>
 </from>
 </term>
 </rule>
 </cos>
 </services>
 </configuration>

Description Match criteria.

Contents <application-sets>—Match one or more application sets.

<applications>—Match one or more applications.

<destination-address>—Match IP destination address.

<destination-address-range>—Match IP destination address range.

<destination-prefix-list>—One or more named lists of destination prefixes to match.

<source-address>—Match IP source address.

<source-address-range>—Match IP source address range.

<source-prefix-list>—One or more named lists of source prefixes to match.

<from> (configuration/services/ggsn/service-identification/dns-rule/term)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <dns-rule>
 <term>
 <from>
 <dns>...</dns>
 </from>
 </term>
 </dns-rule>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Define match criteria.

Contents <dns>—Match DNS sessions.

<from> (configuration/services/ggsn/service-identification/ftp-rule/term)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <ftp-rule>
 <term>
 <from>
 <ftp>...</ftp>
 </from>
 </term>
 </ftp-rule>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Define match criteria.

Contents <ftp>—Match FTP sessions.

<from> (configuration/services/ggsn/service-identification/header-rule/term)

Usage

```

<configuration>
  <services>
    <ggsn>
      <service-identification>
        <header-rule>
          <term>
            <from>
              <ms-prefix>...</ms-prefix>
              <ms-address>...</ms-address>
              <network-prefix>...</network-prefix>
              <network-address>...</network-address>
              <network-port>...</network-port>
              <ms-port>...</ms-port>
              <protocol>...</protocol>
            </from>
          </term>
        </header-rule>
      </service-identification>
    </ggsn>
  </services>
</configuration>

```

Description Define match criteria.

Contents <ms-address>—Match MS address.

<ms-port>—Match MS port.

<ms-prefix>—Match MS prefix.

<network-address>—Match network address.

<network-port>—Match network port.

<network-prefix>—Match network prefix.

<protocol>—Match protocol type.

<from> (configuration/services/ggsn/service-identification/heuristic-rule/term)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <heuristic-rule>
 <term>
 <from>
 <protocol>...</protocol>
 </from>
 </term>
 </heuristic-rule>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Define match criteria.

Contents <protocol>—Match protocol sessions.

<from> (configuration/services/ggsn/service-identification/http-wsp-rule/term)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <http-wsp-rule>
 <term>
 <from>
 <uri>...</uri>
 <http>...</http>
 <wsp>...</wsp>
 <mms>...</mms>
 </from>
 </term>
 </http-wsp-rule>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Define match criteria.

Contents <http>—Match HTTP sessions.

 <mms>—Match MMS sessions.

 <uri>—Match URI settings.

 <wsp>—Match WSP sessions.

<from> (configuration/services/ggsn/service-identification/msn-rule/term)

Usage	<pre> <configuration> <services> <ggsn> <service-identification> <msn-rule> <term> <from> <msn>msn</msn> </from> </term> </msn-rule> </service-identification> </ggsn> </services> </configuration> </pre>
Description	Define match criteria.
Contents	<msn>—Match MSN sessions.

<from> (configuration/services/ggsn/service-identification/pop3-rule/term)

Usage	<pre> <configuration> <services> <ggsn> <service-identification> <pop3-rule> <term> <from> <pop3>...</pop3> </from> </term> </pop3-rule> </service-identification> </ggsn> </services> </configuration> </pre>
Description	Define match criteria.
Contents	<pop3>—Match POP3 sessions.

<from> (configuration/services/ggsn/service-identification/rtsp-rule/term)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <rtsp-rule>
 <term>
 <from>
 <rtsp>...</rtsp>
 </from>
 </term>
 </rtsp-rule>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Define match criteria.

Contents <rtsp>—Match RTSP sessions.

<from> (configuration/services/ggsn/service-identification/sip-rule/term)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <sip-rule>
 <term>
 <from>
 <sip>...</sip>
 </from>
 </term>
 </sip-rule>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Define match criteria.

Contents <sip>—Match SIP sessions.

<from> (configuration/services/ggsn/service-identification/smtp-rule/term)

Usage	<pre> <configuration> <services> <ggsn> <service-identification> <smtp-rule> <term> <from> <smtp>...</smtp> </from> </term> </smtp-rule> </service-identification> </ggsn> </services> </configuration> </pre>
Description	Define match criteria.
Contents	<smtp>—Match SMTP sessions.

<from> (configuration/services/ggsn/service-identification/tftp-rule/term)

Usage	<pre> <configuration> <services> <ggsn> <service-identification> <tftp-rule> <term> <from> <tftp>...</tftp> </from> </term> </tftp-rule> </service-identification> </ggsn> </services> </configuration> </pre>
Description	Define match criteria.
Contents	<tftp>—Match TFTP sessions.

<from> (configuration/services/ids/rule/term)

Usage <configuration>
 <services>
 <ids>
 <rule>
 <term>
 <from>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <source-address-range>...</source-address-range>
 <source-prefix-list>...</source-prefix-list>
 <destination-address-range>...</destination-address-range>
 <destination-prefix-list>...</destination-prefix-list>
 <applications>...</applications>
 <application-sets>...</application-sets>
 </from>
 </term>
 </rule>
 </ids>
 </services>
 </configuration>

Description Define match criteria.

Contents <application-sets>—Match one or more application sets.

<applications>—Match one or more applications.

<destination-address>—Match IP destination address.

<destination-address-range>—Match IP destination address range.

<destination-prefix-list>—One or more named lists of destination prefixes to match.

<source-address>—Match IP source address.

<source-address-range>—Match IP source address range.

<source-prefix-list>—One or more named lists of source prefixes to match.

<from> (configuration/services/ipsec-vpn/rule/term)

Usage <configuration>
 <services>
 <ipsec-vpn>
 <rule>
 <term>
 <from>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <ipsec-inside-interface>*ipsec-inside-interface*</ipsec-inside-interface>
 </from>
 </term>
 </rule>
 </ipsec-vpn>
 </services>
 </configuration>

Description Define match criteria.

Contents <destination-address>—Match IP destination address.
 <ipsec-inside-interface>—IPSec interface to internal network.
 <source-address>—Match IP source address.

<from> (configuration/services/nat/rule/term)

Usage

```

<configuration>
  <services>
    <nat>
      <rule>
        <term>
          <from>
            <source-address>...</source-address>
            <destination-address>...</destination-address>
            <source-address-range>...</source-address-range>
            <source-prefix-list>...</source-prefix-list>
            <destination-address-range>...</destination-address-range>
            <destination-prefix-list>...</destination-prefix-list>
            <applications>...</applications>
            <application-sets>...</application-sets>
          </from>
        </term>
      </rule>
    </nat>
  </services>
</configuration>

```

Description Define match criteria.

Contents

- <application-sets>—Match one or more application sets.
- <applications>—Match one or more applications.
- <destination-address>—Match IP destination address.
- <destination-address-range>—Match IP destination address range.
- <destination-prefix-list>—One or more named lists of destination prefixes to match.
- <source-address>—Match IP source address.
- <source-address-range>—Match IP source address range.
- <source-prefix-list>—One or more named lists of source prefixes to match.

<from> (configuration/services/stateful-firewall/rule/term)

Usage <configuration>
 <services>
 <stateful-firewall>
 <rule>
 <term>
 <from>
 <source-address>...</source-address>
 <destination-address>...</destination-address>
 <source-address-range>...</source-address-range>
 <source-prefix-list>...</source-prefix-list>
 <destination-address-range>...</destination-address-range>
 <destination-prefix-list>...</destination-prefix-list>
 <applications>...</applications>
 <application-sets>...</application-sets>
 </from>
 </term>
 </rule>
 </stateful-firewall>
 </services>
 </configuration>

Description Define match criteria.

Contents <application-sets>—Match one or more application sets.

<applications>—Match one or more applications.

<destination-address>—Match IP destination address.

<destination-address-range>—Match IP destination address range.

<destination-prefix-list>—One or more named lists of destination prefixes to match.

<source-address>—Match IP source address.

<source-address-range>—Match IP source address range.

<source-prefix-list>—One or more named lists of source prefixes to match.

<from-code-points> (configuration/class-of-service/translation-table/to-802.1p-from-dscp/to-code-point)

Usage <configuration>
 <class-of-service>
 <translation-table>
 <to-802.1p-from-dscp>
 <to-code-point>
 <from-code-points>
 <name>*name*</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-802.1p-from-dscp>
 </translation-table>
 </class-of-service>
 </configuration>

Description DSCP code point.

Contents <name>—DSCP code point.

<from-code-points> (configuration/class-of-service/translation-table/to-dscp-from-dscp/to-code-point)

Usage <configuration>
 <class-of-service>
 <translation-table>
 <to-dscp-from-dscp>
 <to-code-point>
 <from-code-points>
 <name>*name*</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-dscp-from-dscp>
 </translation-table>
 </class-of-service>
 </configuration>

Description DSCP code point.

Contents <name>—DSCP code point.

<from-code-points> (configuration/class-of-service/translation-table/to-dscp-ipv6-from-dscp-ipv6/to-code-point)

Usage <configuration>
 <class-of-service>
 <translation-table>
 <to-dscp-ipv6-from-dscp-ipv6>
 <to-code-point>
 <from-code-points>
 <name>*name*</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-dscp-ipv6-from-dscp-ipv6>
 </translation-table>
 </class-of-service>
 </configuration>

Description DSCP-IPV6 code point.

Contents <name>—DSCP-IPV6 code point.

<from-code-points> (configuration/class-of-service/translation-table/to-exp-from-exp/to-code-point)

Usage <configuration>
 <class-of-service>
 <translation-table>
 <to-exp-from-exp>
 <to-code-point>
 <from-code-points>
 <name>*name*</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-exp-from-exp>
 </translation-table>
 </class-of-service>
 </configuration>

Description EXP code point.

Contents <name>—EXP code point.

<from-code-points> (configuration/class-of-service/translation-table/to-inet-precedence-from-inet-precedence/to-code-point)

Usage <configuration>
 <class-of-service>
 <translation-table>
 <to-inet-precedence-from-inet-precedence>
 <to-code-point>
 <from-code-points>
 <name>name</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-inet-precedence-from-inet-precedence>
 </translation-table>
 </class-of-service>
 </configuration>

Description INET PRECEDENCE code point.

Contents <name>—INET PRECEDENCE code point.

<from-code-points> (configuration/dynamic-profiles/class-of-service/translation-table/to-802.1p-from-dscp/to-code-point)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <translation-table>
 <to-802.1p-from-dscp>
 <to-code-point>
 <from-code-points>
 <name>name</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-802.1p-from-dscp>
 </translation-table>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description DSCP code point.

Contents <name>—DSCP code point.

<from-code-points> (configuration/dynamic-profiles/class-of-service/translation-table/to-dscp-from-dscp/to-code-point)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <translation-table>
 <to-dscp-from-dscp>
 <to-code-point>
 <from-code-points>
 <name>name</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-dscp-from-dscp>
 </translation-table>
 </class-of-service>
 </dynamic-profiles>
</configuration>

Description DSCP code point.

Contents <name>—DSCP code point.

<from-code-points> (configuration/dynamic-profiles/class-of-service/translation-table/to-dscp-ipv6-from-dscp-ipv6/to-code-point)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <translation-table>
 <to-dscp-ipv6-from-dscp-ipv6>
 <to-code-point>
 <from-code-points>
 <name>name</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-dscp-ipv6-from-dscp-ipv6>
 </translation-table>
 </class-of-service>
 </dynamic-profiles>
</configuration>

Description DSCP-IPv6 code point.

Contents <name>—DSCP-IPv6 code point.

<from-code-points> (configuration/dynamic-profiles/ class-of-service/translation-table/to-exp-from-exp/to-code-point)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <translation-table>
 <to-exp-from-exp>
 <to-code-point>
 <from-code-points>
 <name>*name*</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-exp-from-exp>
 </translation-table>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description EXP code point.

Contents <name>—EXP code point.

<from-code-points> (configuration/dynamic-profiles/ class-of-service/translation-table/ to-inet-precedence-from-inet-precedence/to-code-point)

Usage <configuration>
 <dynamic-profiles>
 <class-of-service>
 <translation-table>
 <to-inet-precedence-from-inet-precedence>
 <to-code-point>
 <from-code-points>
 <name>*name*</name> <!-- identifier -->
 </from-code-points>
 </to-code-point>
 </to-inet-precedence-from-inet-precedence>
 </translation-table>
 </class-of-service>
 </dynamic-profiles>
 </configuration>

Description INET PRECEDENCE code point.

Contents <name>—INET PRECEDENCE code point.

<ftp> (configuration/services/cos/application-profile)

Usage	<pre> <configuration> <services> <cos> <application-profile> <ftp> <data>...</data> </ftp> </application-profile> </cos> </services> </configuration> </pre>
Description	CoS treatment for FTP data.
Contents	<data>—No documentation is available yet.

<ftp> (configuration/services/ggsn/service-identification/ftp-rule/term/from)

Usage	<pre> <configuration> <services> <ggsn> <service-identification> <ftp-rule> <term> <from> <ftp> <filename>...</filename> <operation>...</operation> </ftp> </from> </term> </ftp-rule> </service-identification> </ggsn> </services> </configuration> </pre>
Description	Match FTP sessions.
Contents	<p><filename>—Match filename.</p> <p><operation>—Limit match to operation being performed.</p>

<ftp> (configuration/system/services)

Usage	<pre> <configuration> <system> <services> <ftp> <connection-limit>connection-limit</connection-limit> <rate-limit>rate-limit</rate-limit> </ftp> </services> </system> </configuration> </pre>
Description	Allow FTP file transfers.
Contents	<p><connection-limit>—Maximum number of allowed connections.</p> <p><rate-limit>—Maximum number of connections per minute.</p>

<ftp-rule> (configuration/services/ggsn/service-identification)

Usage	<pre> <configuration> <services> <ggsn> <service-identification> <ftp-rule> <name>name</name> <!-- identifier --> <term>...</term> <!-- mandatory --> </ftp-rule> </service-identification> </ggsn> </services> </configuration> </pre>
Description	FTP rule.
Contents	<p><name>—Rule name.</p> <p><term>—Define a service identification term.</p>

<ftp-rule-set> (configuration/services/ggsn/service-identification)

Usage <configuration>
 <services>
 <ggsn>
 <service-identification>
 <ftp-rule-set>
 <name>name</name> <!-- identifier -->
 <rule>...</rule>
 </ftp-rule-set>
 </service-identification>
 </ggsn>
 </services>
 </configuration>

Description Define a set of FTP rules.

Contents <name>—Name of the rule set.

 <rule>—Rule to be included in this rule set.

