

## Chapter 22

# Tag Elements Beginning with V

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

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 631, `<apply-groups-except>` on page 631, and `<apply-macro>` on page 632.

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**<v3> (configuration/snmp)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;snmp&gt;     &lt;v3&gt;       &lt;usm&gt;...&lt;/usm&gt;       &lt;vacm&gt;...&lt;/vacm&gt;       &lt;target-address&gt;...&lt;/target-address&gt;       &lt;target-parameters&gt;...&lt;/target-parameters&gt;       &lt;notify&gt;...&lt;/notify&gt;       &lt;notify-filter&gt;...&lt;/notify-filter&gt;       &lt;snmp-community&gt;...&lt;/snmp-community&gt;     &lt;/v3&gt;   &lt;/snmp&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	SNMPv3 configuration information.
<b>Contents</b>	<p><b>&lt;notify&gt;</b>—Used to select management targets for notifications as well as the type of notifications.</p> <p><b>&lt;notify-filter&gt;</b>—Filters to apply to SNMP notifications.</p> <p><b>&lt;snmp-community&gt;</b>—SNMP community and view-based access control model configuration.</p> <p><b>&lt;target-address&gt;</b>—Identifies notification targets as well as allowed management stations.</p> <p><b>&lt;target-parameters&gt;</b>—Parameters and filter name used when sending notifications.</p> <p><b>&lt;usm&gt;</b>—User-based security model (USM) information.</p> <p><b>&lt;vacm&gt;</b>—View-based access control model (VACM) information.</p>

**<vacm> (configuration/snmp/v3)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;snmp&gt;     &lt;v3&gt;       &lt;vacm&gt;         &lt;security-to-group&gt;...&lt;/security-to-group&gt;         &lt;access&gt;...&lt;/access&gt;       &lt;/vacm&gt;     &lt;/v3&gt;   &lt;/snmp&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	View-based access control model (VACM) information.
<b>Contents</b>	<p><b>&lt;access&gt;</b>—Specify SNMP access limits.</p> <p><b>&lt;security-to-group&gt;</b>—Assigns security names to group.</p>

## **<validation> (configuration/logical-systems/routing-instances/instance/routing-options/flow)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <routing-options>  
                     <flow>  
                         **<validation>**  
                             <traceoptions>...</traceoptions>  
                         **</validation>**  
                     </flow>  
                 </routing-options>  
             </instance>  
         </routing-instances>  
     </logical-systems>  
 </configuration>

**Description** Flow route validation options.

**Contents** <traceoptions>—Trace options.

## **<validation> (configuration/logical-systems/routing-options/flow)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-options>  
             <flow>  
                 **<validation>**  
                     <traceoptions>...</traceoptions>  
                 **</validation>**  
             </flow>  
         </routing-options>  
     </logical-systems>  
 </configuration>

**Description** Flow route validation options.

**Contents** <traceoptions>—Trace options.

## **<validation> (configuration/routing-instances/instance/routing-options/flow)**

---

**Usage**   <configuration>  
          <routing-instances>  
          <instance>  
          <routing-options>  
          <flow>  
            **<validation>**  
            <traceoptions>...</traceoptions>  
            **</validation>**  
          </flow>  
          </routing-options>  
          </instance>  
          </routing-instances>  
          </configuration>

**Description**   Flow route validation options.

**Contents**     <traceoptions>—Trace options.

## **<validation> (configuration/routing-options/flow)**

---

**Usage**   <configuration>  
          <routing-options>  
          <flow>  
            **<validation>**  
            <traceoptions>...</traceoptions>  
            **</validation>**  
          </flow>  
          </routing-options>  
          </configuration>

**Description**   Flow route validation options.

**Contents**     <traceoptions>—Trace options.

**<values> (configuration/security/idp/dynamic-attack-group/  
filters/category)**

---

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;security&gt;     &lt;idp&gt;       &lt;dynamic-attack-group&gt;         &lt;filters&gt;           &lt;category&gt;             &lt;values&gt;               &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;             &lt;/values&gt;           &lt;/category&gt;         &lt;/filters&gt;       &lt;/dynamic-attack-group&gt;     &lt;/idp&gt;   &lt;/security&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Values for category field.
<b>Contents</b>	<name>—Values for category field.

## **<values> (configuration/security/idp/dynamic-attack-group/filters/direction)**

---

**Usage**   <configuration>  
           <security>  
           <idp>  
           <dynamic-attack-group>  
           <filters>  
           <direction>  
             **<values>**  
               <name>name</name>   <!-- identifier -->  
             **</values>**  
           </direction>  
         </filters>  
       </dynamic-attack-group>  
     </idp>  
 </security>  
</configuration>

**Description**   Values for direction field.

**Contents**   <name>—Values for direction field.

- any—Select attacks which are in any direction.
- client-to-server—Select attacks from client to server.
- exclude-any—Filter out attacks which are in any direction.
- exclude-client-to-server—Filter out attacks from client to server.
- exclude-server-to-client—Filter out attacks from server to client.
- server-to-client—Select attacks from server to client.

**<values> (configuration/security/idp/dynamic-attack-group/filters/false-positives)**

---

**Usage**   <configuration>  
          <security>  
          <idp>  
          <dynamic-attack-group>  
          <filters>  
          <false-positives>  
          **<values>**  
            <name>name</name>   <!-- identifier -->  
          **</values>**  
          </false-positives>  
          </filters>  
          </dynamic-attack-group>  
          </idp>  
          </security>  
          </configuration>

**Description**   Values for false-positives field.

- Contents**   <name>—Values for false-positives field.
- frequently—Frequent false positives occurrence.
  - occasionally—Occasional false positives occurrence.
  - rarely—Rare false positives occurrence.
  - unknown—Unknown information.

## **<values> (configuration/security/idp/dynamic-attack-group/filters/performance)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;security&gt;     &lt;idp&gt;       &lt;dynamic-attack-group&gt;         &lt;filters&gt;           &lt;performance&gt;             &lt;values&gt;               &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;             &lt;/values&gt;           &lt;/performance&gt;         &lt;/filters&gt;       &lt;/dynamic-attack-group&gt;     &lt;/idp&gt;   &lt;/security&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Values for performance field.
<b>Contents</b>	<p>&lt;name&gt;—Values for performance field.</p> <ul style="list-style-type: none"> <li>■ fast—Fast performance.</li> <li>■ normal—Normal performance.</li> <li>■ slow—Slow performance.</li> <li>■ unknown—Performance level unknown.</li> </ul>

## **<values> (configuration/security/idp/dynamic-attack-group/filters/products)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;security&gt;     &lt;idp&gt;       &lt;dynamic-attack-group&gt;         &lt;filters&gt;           &lt;products&gt;             &lt;values&gt;               &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;             &lt;/values&gt;           &lt;/products&gt;         &lt;/filters&gt;       &lt;/dynamic-attack-group&gt;     &lt;/idp&gt;   &lt;/security&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Values for products field.
<b>Contents</b>	<p>&lt;name&gt;—Values for products field.</p>



**<values> (configuration/security/idp/dynamic-attack-group/  
filters/service)**

---

**Usage**   <configuration>  
          <security>  
          <idp>  
          <dynamic-attack-group>  
          <filters>  
          <service>  
              **<values>**  
                  <name>name</name>   <!-- identifier -->  
              **</values>**  
          </service>  
          </filters>  
          </dynamic-attack-group>  
          </idp>  
          </security>  
          </configuration>

**Description**   Values for service field.

**Contents**    <name>—Values for service field.

**<values> (configuration/security/idp/dynamic-attack-group/  
filters/severity)**

---

**Usage**   <configuration>  
          <security>  
          <idp>  
          <dynamic-attack-group>  
          <filters>  
          <severity>  
          **<values>**  
            <name>name</name>   <!-- identifier -->  
          **</values>**  
          </severity>  
          </filters>  
          </dynamic-attack-group>  
          </idp>  
          </security>  
          </configuration>

**Description**   Values for severity field.

**Contents**   <name>—Values for severity field.

- critical—The attack is a critical one.
- info—Provide information of attack when it matches.
- major—The attack is a major one.
- minor—The attack is a minor one.
- warning—Issue a warning when attack matches.

**<values> (configuration/security/idp/dynamic-attack-group/filters/type)**

---

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;security&gt;     &lt;idp&gt;       &lt;dynamic-attack-group&gt;         &lt;filters&gt;           &lt;type&gt;             &lt;values&gt;               &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;             &lt;/values&gt;           &lt;/type&gt;         &lt;/filters&gt;       &lt;/dynamic-attack-group&gt;     &lt;/idp&gt;   &lt;/security&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Values for type field.
<b>Contents</b>	<p>&lt;name&gt;—Values for type field.</p> <ul style="list-style-type: none"><li>■ anomaly—Protocol anomalies.</li><li>■ signature—Signature based attacks.</li></ul>

**<variables> (configuration/dynamic-profiles)**

---

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;dynamic-profiles&gt;     &lt;variables&gt;       &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;       &lt;default-value&gt;default-value&lt;/default-value&gt;       &lt;mandatory/&gt;       &lt;radius&gt;...&lt;/radius&gt;     &lt;/variables&gt;   &lt;/dynamic-profiles&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Dynamic variable configuration.
<b>Contents</b>	<p>&lt;default-value&gt;—Default value for variable.</p> <p>&lt;mandatory&gt;—Variable must be supplied by external server.</p> <p>&lt;name&gt;—Name of variable.</p> <p>&lt;radius&gt;—No documentation is available yet.</p>

## **<vbr> (configuration/dynamic-profiles/interfaces/interface/atm-options/vpi/shaping)**

---

**Usage**

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <atm-options>
          <vpi>
            <shaping>
              <vbr>
                <peak>peak</peak>    <!-- mandatory -->
                <sustained>sustained</sustained>    <!-- mandatory -->
                <burst>burst</burst>    <!-- mandatory -->
                <cdvt>cdvt</cdvt>
              </vbr>
            </shaping>
          </vpi>
        </atm-options>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

**Description** Variable bandwidth utilization.

**Contents** <burst>—Burst size.

<cdvt>—Cell Delay Variation Tolerance.

<peak>—Peak rate.

<sustained>—Sustained rate.

## **<vbr> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet/address/multipoint-destination/shaping)**

---

**Usage**   <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           <inet>  
           <address>  
           <multipoint-destination>  
           <shaping>  
             **<vbr>**  
               <peak>*peak*</peak>   <!-- mandatory -->  
               <sustained>*sustained*</sustained>   <!-- mandatory -->  
               <burst>*burst*</burst>   <!-- mandatory -->  
               <cdvt>*cdvt*</cdvt>  
             **</vbr>**  
           </shaping>  
           </multipoint-destination>  
           </address>  
           </inet>  
           </family>  
           </unit>  
           </interface>  
           </interfaces>  
           </dynamic-profiles>  
           </configuration>

**Description**   Variable bandwidth utilization.

**Contents**   <burst>—Burst size.

          <cdvt>—Cell Delay Variation Tolerance.

          <peak>—Peak rate.

          <sustained>—Sustained rate.

## **<vbr> (configuration/dynamic-profiles/interfaces/interface/unit/shaping)**

---

**Usage**   <configuration>  
          <dynamic-profiles>  
          <interfaces>  
          <interface>  
          <unit>  
          <shaping>  
          **<vbr>**  
            <peak>*peak*</peak>   <!-- mandatory -->  
            <sustained>*sustained*</sustained>   <!-- mandatory -->  
            <burst>*burst*</burst>   <!-- mandatory -->  
            <cdvt>*cdvt*</cdvt>  
          **</vbr>**  
          </shaping>  
          </unit>  
          </interface>  
          </interfaces>  
          </dynamic-profiles>  
          </configuration>

**Description**   Variable bandwidth utilization.

**Contents**   <burst>—Burst size.  
  
              <cdvt>—Cell Delay Variation Tolerance.  
  
              <peak>—Peak rate.  
  
              <sustained>—Sustained rate.

## **<vbr> (configuration/interfaces/interface/atm-options/vpi/shaping)**

---

**Usage**   <configuration>  
               <interfaces>  
                   <interface>  
                       <atm-options>  
                           <vpi>  
                               <shaping>  
                                   **<vbr>**  
                                       <peak>*peak*</peak>   <!-- mandatory -->  
                                       <sustained>*sustained*</sustained>   <!-- mandatory -->  
                                       <burst>*burst*</burst>   <!-- mandatory -->  
                                       <cdvt>*cdvt*</cdvt>  
                                   **</vbr>**  
                               </shaping>  
                           </vpi>  
                       </atm-options>  
                   </interface>  
               </interfaces>  
           </configuration>

**Description**   Variable bandwidth utilization.

**Contents**   <burst>—Burst size.  
               <cdvt>—Cell Delay Variation Tolerance.  
               <peak>—Peak rate.  
               <sustained>—Sustained rate.

## **<vbr> (configuration/interfaces/interface/unit/family/inet/address/multipoint-destination/shaping)**

---

**Usage**

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <inet>
            <address>
              <multipoint-destination>
                <shaping>
                  <vbr>
                    <peak>peak</peak>    <!-- mandatory -->
                    <sustained>sustained</sustained>    <!-- mandatory -->
                    <burst>burst</burst>    <!-- mandatory -->
                    <cdvt>cdvt</cdvt>
                  </vbr>
                </shaping>
              </multipoint-destination>
            </address>
          </inet>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>

```

**Description** Variable bandwidth utilization.

**Contents**

- <burst>—Burst size.
- <cdvt>—Cell Delay Variation Tolerance.
- <peak>—Peak rate.
- <sustained>—Sustained rate.



**<vbr> (configuration/interfaces/interface/unit/shaping)**

---

**Usage**   <configuration>  
           <interfaces>  
           <interface>  
           <unit>  
           <shaping>  
             **<vbr>**  
               <peak>*peak*</peak>   <!-- mandatory -->  
               <sustained>*sustained*</sustained>   <!-- mandatory -->  
               <burst>*burst*</burst>   <!-- mandatory -->  
               <cdvt>*cdvt*</cdvt>  
             **</vbr>**  
           </shaping>  
         </unit>  
       </interface>  
     </interfaces>  
 </configuration>

**Description**   Variable bandwidth utilization.

**Contents**   <burst>—Burst size.  
               <cdvt>—Cell Delay Variation Tolerance.  
               <peak>—Peak rate.  
               <sustained>—Sustained rate.

## **<vbr> (configuration/logical-systems/interfaces/interface/unit/family/inet/address/multipoint-destination/shaping)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>
              <address>
                <multipoint-destination>
                  <shaping>
                    <vbr>
                      <peak>peak</peak>    <!-- mandatory -->
                      <sustained>sustained</sustained>    <!-- mandatory -->
                      <burst>burst</burst>    <!-- mandatory -->
                      <cdvt>cdvt</cdvt>
                    </vbr>
                  </shaping>
                </multipoint-destination>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

**Description** Variable bandwidth utilization.

**Contents** <burst>—Burst size.

<cdvt>—Cell Delay Variation Tolerance.

<peak>—Peak rate.

<sustained>—Sustained rate.

## <vbr> (configuration/logical-systems/interfaces/interface/unit/shaping)

---

**Usage**   <configuration>  
               <logical-systems>  
               <interfaces>  
               <interface>  
               <unit>  
               <shaping>  
               **<vbr>**  
                   <peak>*peak*</peak>   <!-- mandatory -->  
                   <sustained>*sustained*</sustained>   <!-- mandatory -->  
                   <burst>*burst*</burst>   <!-- mandatory -->  
                   <cdvt>*cdvt*</cdvt>  
               **</vbr>**  
               </shaping>  
               </unit>  
               </interface>  
               </interfaces>  
               </logical-systems>  
               </configuration>

**Description**   Variable bandwidth utilization.

**Contents**   <burst>—Burst size.

              <cdvt>—Cell Delay Variation Tolerance.

              <peak>—Peak rate.

              <sustained>—Sustained rate.

## **<vci-range> (configuration/dynamic-profiles/interfaces/interface/unit)**

---

**Usage** <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface>  
           <unit>  
             **<vci-range>**  
               <start>start</start>   <!-- mandatory -->  
               <end>end</end>       <!-- mandatory -->  
             **</vci-range>**  
           </unit>  
         </interface>  
       </interfaces>  
     </dynamic-profiles>  
 </configuration>

**Description** ATM VCI range start < start-vci > end < end-vci > .

**Contents** <end>—ATM VCI range's end value.  
           <start>—ATM VCI range's start value.

## **<vci-range> (configuration/interfaces/interface/unit)**

---

**Usage** <configuration>  
           <interfaces>  
           <interface>  
           <unit>  
             **<vci-range>**  
               <start>start</start>   <!-- mandatory -->  
               <end>end</end>       <!-- mandatory -->  
             **</vci-range>**  
           </unit>  
         </interface>  
       </interfaces>  
 </configuration>

**Description** ATM VCI range start < start-vci > end < end-vci > .

**Contents** <end>—ATM VCI range's end value.  
           <start>—ATM VCI range's start value.

## **<vci-range> (configuration/logical-systems/interfaces/interface/unit)**

---

**Usage**   <configuration>  
           <logical-systems>  
           <interfaces>  
           <interface>  
           <unit>  
             **<vci-range>**  
               <start>start</start>   <!-- mandatory -->  
               <end>end</end>       <!-- mandatory -->  
             **</vci-range>**  
           </unit>  
         </interface>  
       </interfaces>  
     </logical-systems>  
 </configuration>

**Description**   ATM VCI range start <start-vci> end <end-vci> .

**Contents**     <end>—ATM VCI range's end value.  
                   <start>—ATM VCI range's start value.

## **<vendor-id> (configuration/dynamic-profiles/variables/radius)**

---

**Usage**   <configuration>  
           <dynamic-profiles>  
           <variables>  
           <radius>  
             **<vendor-id>**  
               <name>name</name>   <!-- identifier -->  
               <attribute>attribute</attribute>  
               <sub-attribute>sub-attribute</sub-attribute>  
               <tag>tag</tag>  
             **</vendor-id>**  
           </radius>  
         </variables>  
       </dynamic-profiles>  
 </configuration>

**Description**   No documentation is available yet.

**Contents**     <attribute>—Radius attribute number.  
                   <name>—Radius vendor identifier.  
                   <sub-attribute>—Radius sub-attribute number.  
                   <tag>—Radius tag.

## **<vendor-id> (configuration/forwarding-options/helpers/bootp/dhcp-option82)**

---

**Usage**   <configuration>  
           <forwarding-options>  
           <helpers>  
           <bootp>  
           <dhcp-option82>  
           **<vendor-id>**  
           <use-string>*use-string*</use-string>  
           **</vendor-id>**  
           </dhcp-option82>  
           </bootp>  
           </helpers>  
           </forwarding-options>  
           </configuration>

**Description**   Configure DHCP option 82 vendor id.

**Contents**   <use-string>—Use raw string instead of the default vendor id.

## **<vendor-id> (configuration/forwarding-options/helpers/bootp/interface/dhcp-option82)**

---

**Usage**   <configuration>  
           <forwarding-options>  
           <helpers>  
           <bootp>  
           <interface>  
           <dhcp-option82>  
           **<vendor-id>**  
           <use-string>*use-string*</use-string>  
           **</vendor-id>**  
           </dhcp-option82>  
           </interface>  
           </bootp>  
           </helpers>  
           </forwarding-options>  
           </configuration>

**Description**   Configure DHCP option 82 vendor id.

**Contents**   <use-string>—Use raw string instead of the default vendor id.

## **<vendor-id> (configuration/logical-systems/routing-instances/instance/forwarding-options/helpers/bootp/dhcp-option82)**

---

**Usage**   <configuration>  
           <logical-systems>  
           <routing-instances>  
           <instance>  
           <forwarding-options>  
           <helpers>  
           <bootp>  
           <dhcp-option82>  
               **<vendor-id>**  
               <use-string>*use-string*</use-string>  
               **</vendor-id>**  
           </dhcp-option82>  
           </bootp>  
           </helpers>  
           </forwarding-options>  
           </instance>  
           </routing-instances>  
           </logical-systems>  
           </configuration>

**Description**   Configure DHCP option 82 vendor id.

**Contents**   <use-string>—Use raw string instead of the default vendor id.

## **<vendor-id> (configuration/logical-systems/routing-instances/instance/forwarding-options/helpers/bootp/interface/dhcp-option82)**

---

**Usage** <configuration>  
 <logical-systems>  
 <routing-instances>  
 <instance>  
 <forwarding-options>  
 <helpers>  
 <bootp>  
 <interface>  
 <dhcp-option82>  
   **<vendor-id>**  
     <use-string>use-string</use-string>  
   **</vendor-id>**  
 </dhcp-option82>  
 </interface>  
 </bootp>  
 </helpers>  
 </forwarding-options>  
 </instance>  
 </routing-instances>  
 </logical-systems>  
 </configuration>

**Description** Configure DHCP option 82 vendor id.

**Contents** <use-string>—Use raw string instead of the default vendor id.

## **<vendor-id> (configuration/routing-instances/instance/forwarding-options/helpers/bootp/dhcp-option82)**

---

**Usage** <configuration>  
 <routing-instances>  
 <instance>  
 <forwarding-options>  
 <helpers>  
 <bootp>  
 <dhcp-option82>  
   **<vendor-id>**  
     <use-string>use-string</use-string>  
   **</vendor-id>**  
 </dhcp-option82>  
 </bootp>  
 </helpers>  
 </forwarding-options>  
 </instance>  
 </routing-instances>  
 </configuration>

**Description** Configure DHCP option 82 vendor id.

**Contents** <use-string>—Use raw string instead of the default vendor id.



## **<vendor-id> (configuration/routing-instances/instance/forwarding-options/helpers/bootp/interface/dhcp-option82)**

---

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <forwarding-options>  
           <helpers>  
           <bootp>  
           <interface>  
           <dhcp-option82>  
           **<vendor-id>**  
           <use-string>*use-string*</use-string>  
           **</vendor-id>**  
           </dhcp-option82>  
           </interface>  
           </bootp>  
           </helpers>  
           </forwarding-options>  
           </instance>  
           </routing-instances>  
           </configuration>

**Description**   Configure DHCP option 82 vendor id.

**Contents**   <use-string>—Use raw string instead of the default vendor id.

## **<vendor-option> (configuration/bridge-domains/domain/forwarding-options/dhcp-relay/group/relay-option-60)**

---

**Usage**

```

<configuration>
  <bridge-domains>
    <domain>
      <forwarding-options>
        <dhcp-relay>
          <group>
            <relay-option-60>
              <vendor-option>
                <equals>...</equals>
                <starts-with>...</starts-with>
                <default-relay-server-group>default-relay-server-group
                </default-relay-server-group>
                <default-local-server-group>default-local-server-group
                </default-local-server-group>
                <drop/>
              </vendor-option>
            </relay-option-60>
          </group>
        </dhcp-relay>
      </forwarding-options>
    </domain>
  </bridge-domains>
</configuration>

```

**Description** Add vendor option.

**Contents**

- <default-local-server-group>—Name of DHCP local server group when match is not made.
- <default-relay-server-group>—Name of DHCP relay server group when match is not made.
- <drop>—Discard when a match is not made.
- <equals>—Option 60 equals.
- <starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/bridge-domains/domain/forwarding-options/dhcp-relay/relay-option-60)**

---

**Usage**   <configuration>  
               <bridge-domains>  
               <domain>  
               <forwarding-options>  
               <dhcp-relay>  
               <relay-option-60>  
               **<vendor-option>**  
                   <equals>...</equals>  
                   <starts-with>...</starts-with>  
                   <default-relay-server-group>*default-relay-server-group*  
                   </default-relay-server-group>  
                   <default-local-server-group>*default-local-server-group*  
                   </default-local-server-group>  
                   <drop/>  
               **</vendor-option>**  
               </relay-option-60>  
               </dhcp-relay>  
               </forwarding-options>  
               </domain>  
               </bridge-domains>  
               </configuration>

**Description**   Add vendor option.

**Contents**   <default-local-server-group>—Name of DHCP local server group when match is not made.

              <default-relay-server-group>—Name of DHCP relay server group when match is not made.

              <drop>—Discard when a match is not made.

              <equals>—Option 60 equals.

              <starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/forwarding-options/dhcp-relay/group/relay-option-60)**

---

**Usage**

```

<configuration>
  <forwarding-options>
    <dhcp-relay>
      <group>
        <relay-option-60>
          <vendor-option>
            <equals>...</equals>
            <starts-with>...</starts-with>
            <default-relay-server-group>default-relay-server-group
              </default-relay-server-group>
            <default-local-server-group>default-local-server-group
              </default-local-server-group>
            <drop/>
          </vendor-option>
        </relay-option-60>
      </group>
    </dhcp-relay>
  </forwarding-options>
</configuration>

```

**Description** Add vendor option.

**Contents**

- <default-local-server-group>—Name of DHCP local server group when match is not made.
- <default-relay-server-group>—Name of DHCP relay server group when match is not made.
- <drop>—Discard when a match is not made.
- <equals>—Option 60 equals.
- <starts-with>—Option 60 starts with.

## <vendor-option> (configuration/forwarding-options/dhcp-relay/relay-option-60)

---

**Usage** <configuration>  
     <forwarding-options>  
         <dhcp-relay>  
             <relay-option-60>  
                 <vendor-option>  
                     <equals>...</equals>  
                     <starts-with>...</starts-with>  
                     <default-relay-server-group>*default-relay-server-group*  
                         </default-relay-server-group>  
                     <default-local-server-group>*default-local-server-group*  
                         </default-local-server-group>  
                     <drop/>  
                 </vendor-option>  
             </relay-option-60>  
         </dhcp-relay>  
     </forwarding-options>  
</configuration>

**Description** Add vendor option.

**Contents** <default-local-server-group>—Name of DHCP local server group when match is not made.

<default-relay-server-group>—Name of DHCP relay server group when match is not made.

<drop>—Discard when a match is not made.

<equals>—Option 60 equals.

<starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/logical-systems/forwarding-options/dhcp-relay/group/relay-option-60)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <forwarding-options>
      <dhcp-relay>
        <group>
          <relay-option-60>
            <vendor-option>
              <equals>...</equals>
              <starts-with>...</starts-with>
              <default-relay-server-group>default-relay-server-group
                </default-relay-server-group>
              <default-local-server-group>default-local-server-group
                </default-local-server-group>
              <drop/>
            </vendor-option>
          </relay-option-60>
        </group>
      </dhcp-relay>
    </forwarding-options>
  </logical-systems>
</configuration>

```

**Description** Add vendor option.

**Contents**

- <default-local-server-group>—Name of DHCP local server group when match is not made.
- <default-relay-server-group>—Name of DHCP relay server group when match is not made.
- <drop>—Discard when a match is not made.
- <equals>—Option 60 equals.
- <starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/logical-systems/forwarding-options/dhcp-relay/relay-option-60)**

---

**Usage**   <configuration>  
               <logical-systems>  
                   <forwarding-options>  
                       <dhcp-relay>  
                         <relay-option-60>  
                           **<vendor-option>**  
                               <equals>...</equals>  
                               <starts-with>...</starts-with>  
                               <default-relay-server-group>default-relay-server-group  
   </default-relay-server-group>  
                               <default-local-server-group>default-local-server-group  
   </default-local-server-group>  
                               <drop/>  
                           **</vendor-option>**  
                         </relay-option-60>  
                       </dhcp-relay>  
                   </forwarding-options>  
               </logical-systems>  
           </configuration>

**Description**   Add vendor option.

**Contents**   <default-local-server-group>—Name of DHCP local server group when match is not made.

              <default-relay-server-group>—Name of DHCP relay server group when match is not made.

              <drop>—Discard when a match is not made.

              <equals>—Option 60 equals.

              <starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/logical-systems/ routing-instances/instance/bridge-domains/domain/ forwarding-options/dhcp-relay/group/relay-option-60)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <bridge-domains>
          <domain>
            <forwarding-options>
              <dhcp-relay>
                <group>
                  <relay-option-60>
                    <vendor-option>
                      <equals>...</equals>
                      <starts-with>...</starts-with>
                      <default-relay-server-group>default-relay-server-group
                        </default-relay-server-group>
                      <default-local-server-group>default-local-server-group
                        </default-local-server-group>
                      <drop/>
                    </vendor-option>
                  </relay-option-60>
                </group>
              </dhcp-relay>
            </forwarding-options>
          </domain>
        </bridge-domains>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

**Description** Add vendor option.

**Contents** <default-local-server-group>—Name of DHCP local server group when match is not made.

<default-relay-server-group>—Name of DHCP relay server group when match is not made.

<drop>—Discard when a match is not made.

<equals>—Option 60 equals.

<starts-with>—Option 60 starts with.



## **<vendor-option> (configuration/logical-systems/ routing-instances/instance/bridge-domains/domain/ forwarding-options/dhcp-relay/relay-option-60)**

---

**Usage**   <configuration>  
           <logical-systems>  
           <routing-instances>  
           <instance>  
           <bridge-domains>  
           <domain>  
           <forwarding-options>  
           <dhcp-relay>  
           <relay-option-60>  
           **<vendor-option>**  
           <equals>...</equals>  
           <starts-with>...</starts-with>  
           <default-relay-server-group>default-relay-server-group  
           </default-relay-server-group>  
           <default-local-server-group>default-local-server-group  
           </default-local-server-group>  
           <drop/>  
           **</vendor-option>**  
           </relay-option-60>  
           </dhcp-relay>  
           </forwarding-options>  
           </domain>  
           </bridge-domains>  
           </instance>  
           </routing-instances>  
           </logical-systems>  
           </configuration>

**Description**   Add vendor option.

**Contents**   <default-local-server-group>—Name of DHCP local server group when match is not made.

          <default-relay-server-group>—Name of DHCP relay server group when match is not made.

          <drop>—Discard when a match is not made.

          <equals>—Option 60 equals.

          <starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/logical-systems/ routing-instances/instance/forwarding-options/dhcp-relay/group/ relay-option-60)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <forwarding-options>
          <dhcp-relay>
            <group>
              <relay-option-60>
                <vendor-option>
                  <equals>...</equals>
                  <starts-with>...</starts-with>
                  <default-relay-server-group>default-relay-server-group
                </default-relay-server-group>
                  <default-local-server-group>default-local-server-group
                </default-local-server-group>
                  <drop/>
                </vendor-option>
              </relay-option-60>
            </group>
          </dhcp-relay>
        </forwarding-options>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

**Description** Add vendor option.

**Contents** <default-local-server-group>—Name of DHCP local server group when match is not made.

<default-relay-server-group>—Name of DHCP relay server group when match is not made.

<drop>—Discard when a match is not made.

<equals>—Option 60 equals.

<starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/logical-systems/ routing-instances/instance/forwarding-options/dhcp-relay/ relay-option-60)**

---

**Usage**    <configuration>  
              <logical-systems>  
              <routing-instances>  
              <instance>  
              <forwarding-options>  
              <dhcp-relay>  
              <relay-option-60>  
              **<vendor-option>**  
                  <equals>...</equals>  
                  <starts-with>...</starts-with>  
                  <default-relay-server-group>default-relay-server-group  
                  </default-relay-server-group>  
                  <default-local-server-group>default-local-server-group  
                  </default-local-server-group>  
                  <drop/>  
              **</vendor-option>**  
              </relay-option-60>  
              </dhcp-relay>  
              </forwarding-options>  
              </instance>  
              </routing-instances>  
              </logical-systems>  
              </configuration>

**Description**    Add vendor option.

**Contents**    <default-local-server-group>—Name of DHCP local server group when match is not made.

                 <default-relay-server-group>—Name of DHCP relay server group when match is not made.

                 <drop>—Discard when a match is not made.

                 <equals>—Option 60 equals.

                 <starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/routing-instances/instance/bridge-domains/domain/forwarding-options/dhcp-relay/group/relay-option-60)**

---

**Usage**

```

<configuration>
  <routing-instances>
    <instance>
      <bridge-domains>
        <domain>
          <forwarding-options>
            <dhcp-relay>
              <group>
                <relay-option-60>
                  <vendor-option>
                    <equals>...</equals>
                    <starts-with>...</starts-with>
                    <default-relay-server-group>default-relay-server-group
                  </default-relay-server-group>
                    <default-local-server-group>default-local-server-group
                  </default-local-server-group>
                    <drop/>
                  </vendor-option>
                </relay-option-60>
              </group>
            </dhcp-relay>
          </forwarding-options>
        </domain>
      </bridge-domains>
    </instance>
  </routing-instances>
</configuration>

```

**Description** Add vendor option.

**Contents** <default-local-server-group>—Name of DHCP local server group when match is not made.

<default-relay-server-group>—Name of DHCP relay server group when match is not made.

<drop>—Discard when a match is not made.

<equals>—Option 60 equals.

<starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/routing-instances/instance/bridge-domains/domain/forwarding-options/dhcp-relay/relay-option-60)**

---

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <bridge-domains>  
           <domain>  
           <forwarding-options>  
           <dhcp-relay>  
           <relay-option-60>  
           **<vendor-option>**  
           <equals>...</equals>  
           <starts-with>...</starts-with>  
           <default-relay-server-group>default-relay-server-group  
           </default-relay-server-group>  
           <default-local-server-group>default-local-server-group  
           </default-local-server-group>  
           <drop/>  
           **</vendor-option>**  
           </relay-option-60>  
           </dhcp-relay>  
           </forwarding-options>  
           </domain>  
           </bridge-domains>  
           </instance>  
           </routing-instances>  
           </configuration>

**Description**   Add vendor option.

**Contents**   <default-local-server-group>—Name of DHCP local server group when match is not made.

          <default-relay-server-group>—Name of DHCP relay server group when match is not made.

          <drop>—Discard when a match is not made.

          <equals>—Option 60 equals.

          <starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/routing-instances/instance/forwarding-options/dhcp-relay/group/relay-option-60)**

---

**Usage**

```

<configuration>
  <routing-instances>
    <instance>
      <forwarding-options>
        <dhcp-relay>
          <group>
            <relay-option-60>
              <vendor-option>
                <equals>...</equals>
                <starts-with>...</starts-with>
                <default-relay-server-group>default-relay-server-group
                </default-relay-server-group>
                <default-local-server-group>default-local-server-group
                </default-local-server-group>
                <drop/>
              </vendor-option>
            </relay-option-60>
          </group>
        </dhcp-relay>
      </forwarding-options>
    </instance>
  </routing-instances>
</configuration>

```

**Description** Add vendor option.

**Contents** <default-local-server-group>—Name of DHCP local server group when match is not made.

<default-relay-server-group>—Name of DHCP relay server group when match is not made.

<drop>—Discard when a match is not made.

<equals>—Option 60 equals.

<starts-with>—Option 60 starts with.

## **<vendor-option> (configuration/routing-instances/instance/forwarding-options/dhcp-relay/relay-option-60)**

---

**Usage**   <configuration>  
               <routing-instances>  
                   <instance>  
                       <forwarding-options>  
                         <dhcp-relay>  
                           <relay-option-60>  
                               **<vendor-option>**  
                                 <equals>...</equals>  
                                 <starts-with>...</starts-with>  
                                 <default-relay-server-group>*default-relay-server-group*  
                                   </default-relay-server-group>  
                                 <default-local-server-group>*default-local-server-group*  
                                   </default-local-server-group>  
                                 <drop/>  
                               **</vendor-option>**  
                             </relay-option-60>  
                         </dhcp-relay>  
                     </forwarding-options>  
                 </instance>  
       </routing-instances>  
   </configuration>

**Description**   Add vendor option.

**Contents**   <default-local-server-group>—Name of DHCP local server group when match is not made.

              <default-relay-server-group>—Name of DHCP relay server group when match is not made.

              <drop>—Discard when a match is not made.

              <equals>—Option 60 equals.

              <starts-with>—Option 60 starts with.

## **<verilink> (configuration/dynamic-profiles/interfaces/interface/t3-options/compatibility-mode)**

---

**Usage**   <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface>  
           <t3-options>  
           <compatibility-mode>  
           **<verilink>**  
           <subrate>*subrate*</subrate>  
           **</verilink>**  
           </compatibility-mode>  
           </t3-options>  
           </interface>  
           </interfaces>  
           </dynamic-profiles>  
         </configuration>

**Description**   Compatible with Verilink CSU (not on 4-port T3 PIC).

**Contents**    <subrate>—Set subrate value.

## **<verilink> (configuration/interfaces/interface/t3-options/compatibility-mode)**

---

**Usage**   <configuration>  
           <interfaces>  
           <interface>  
           <t3-options>  
           <compatibility-mode>  
           **<verilink>**  
           <subrate>*subrate*</subrate>  
           **</verilink>**  
           </compatibility-mode>  
           </t3-options>  
           </interface>  
           </interfaces>  
         </configuration>

**Description**   Compatible with Verilink CSU (not on 4-port T3 PIC).

**Contents**    <subrate>—Set subrate value.



**<version-list> (configuration/services/ggsn/gtp)**

---

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;services&gt;     &lt;ggsn&gt;       &lt;gtp&gt;         &lt;version-list&gt;           &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;         &lt;/version-list&gt;       &lt;/gtp&gt;     &lt;/ggsn&gt;   &lt;/services&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	GTP version.
<b>Contents</b>	<p>&lt;name&gt;—GTP version.</p> <ul style="list-style-type: none"><li>■ 97—Use GTP version 97.</li><li>■ 98—Use GTP version 98.</li><li>■ 99—Use GTP version 99.</li></ul>

**<version9> (configuration/forwarding-options/sampling/output/cflowd)**

---

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;forwarding-options&gt;     &lt;sampling&gt;       &lt;output&gt;         &lt;cflowd&gt;           &lt;version9&gt;             &lt;template&gt;...&lt;/template&gt;    &lt;!-- mandatory --&gt;           &lt;/version9&gt;         &lt;/cflowd&gt;       &lt;/output&gt;     &lt;/sampling&gt;   &lt;/forwarding-options&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Export data in version 9 format.
<b>Contents</b>	<template>—Template configuration.

## **<version9> (configuration/logical-systems/routing-instances/instance/forwarding-options/sampling/output/cflowd)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <forwarding-options>  
                     <sampling>  
                         <output>  
                             <cflowd>  
                                 **<version9>**  
                                     <template>...</template>   <!-- mandatory -->  
                                 **</version9>**  
                             </cflowd>  
                         </output>  
                     </sampling>  
                 </forwarding-options>  
     </instance>  
     </routing-instances>  
     </logical-systems>  
 </configuration>

**Description** Export data in version 9 format.

**Contents** <template>—Template configuration.

## **<version9> (configuration/routing-instances/instance/forwarding-options/sampling/output/cflowd)**

---

**Usage** <configuration>  
     <routing-instances>  
         <instance>  
             <forwarding-options>  
                 <sampling>  
                     <output>  
                         <cflowd>  
                             **<version9>**  
                                 <template>...</template>   <!-- mandatory -->  
                                 **</version9>**  
                     </cflowd>  
                 </output>  
             </sampling>  
         </forwarding-options>  
     </instance>  
     </routing-instances>  
 </configuration>

**Description** Export data in version 9 format.

**Contents** <template>—Template configuration.

**<version9> (configuration/services/flow-monitoring)**

---

**Usage**   <configuration>  
          <services>  
          <flow-monitoring>  
          **<version9>**  
          <template>...</template>  
          **</version9>**  
          </flow-monitoring>  
          </services>  
          </configuration>

**Description**   Version 9 configuration.

**Contents**   <template>—One or more version 9 templates.

## <via> (configuration/services/ggsn/service-identification/sip-rule/term/from/sip)

---

**Usage**

```

<configuration>
  <services>
    <ggsn>
      <service-identification>
        <sip-rule>
          <term>
            <from>
              <sip>
                <via>
                  <include-uri-handling>...</include-uri-handling>
                  <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>
                </via>
              </sip>
            </from>
          </term>
        </sip-rule>
      </service-identification>
    </ggsn>
  </services>
</configuration>

```

**Description** Via settings.

**Contents** <contains>—Matches a substring.

<ends-with>—End matches.

<include-uri-handling>—No documentation is available yet.

<not-contains>—Doesn't match a substring.

<not-ends-with>—End doesn't match.

<not-starts-with>—Beginning doesn't match.

<starts-with>—Beginning matches.

**<video> (configuration/services/cos/application-profile/sip)**

---

**Usage** <configuration>  
           <services>  
             <cos>  
               <application-profile>  
                 <sip>  
                   **<video>**  
                     <dscp>*dscp*</dscp>  
                     <forwarding-class>*forwarding-class*</forwarding-class>  
                   **</video>**  
                 </sip>  
               </application-profile>  
             </cos>  
           </services>  
         </configuration>

**Description** CoS treatment of SIP video data.

**Contents** <dscp>—Code point alias or bit string.  
               <forwarding-class>—Forwarding class assigned to outgoing packets.

**<view> (configuration/snmp)**

---

**Usage** <configuration>  
           <snmp>  
             **<view>**  
               <name>*name*</name>   <!-- identifier -->  
               <oid>...</oid>  
             **</view>**  
           </snmp>  
         </configuration>

**Description** Define MIB views.

**Contents** <name>—MIB view name.  
               <oid>—OID include/exclude list.

## **<virtual-address> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet/address/vrrp-group)**

---

**Usage**

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>
              <address>
                <vrrp-group>
                  <virtual-address>
                    <name>name</name>    <!-- identifier -->
                  </virtual-address>
                </vrrp-group>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

**Description** One or more virtual IPv4 addresses.

**Contents** <name>—One or more virtual IPv4 addresses.

## **<virtual-address> (configuration/dynamic-profiles/interfaces/ interface/unit/family/inet6/address/vrrp-inet6-group)**

---

**Usage**

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <address>
                <vrrp-inet6-group>
                  <virtual-address>
                    <name>name</name>    <!-- identifier -->
                  </virtual-address>
                </vrrp-inet6-group>
              </address>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

**Description** One or more virtual IPv4 addresses.

**Contents** <name>—One or more virtual IPv4 addresses.

## **<virtual-address> (configuration/interfaces/interface/unit/family/inet/address/vrrp-group)**

---

**Usage**

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <inet>
            <address>
              <vrrp-group>
                <virtual-address>
                  <name>name</name>    <!-- identifier -->
                </virtual-address>
              </vrrp-group>
            </address>
          </inet>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>

```

**Description** One or more virtual IPv4 addresses.

**Contents** <name>—One or more virtual IPv4 addresses.

## **<virtual-address> (configuration/interfaces/interface/unit/family/inet6/address/vrrp-inet6-group)**

---

**Usage**

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <inet6>
            <address>
              <vrrp-inet6-group>
                <virtual-address>
                  <name>name</name>    <!-- identifier -->
                </virtual-address>
              </vrrp-inet6-group>
            </address>
          </inet6>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>

```

**Description** One or more virtual IPv4 addresses.

**Contents** <name>—One or more virtual IPv4 addresses.



## **<virtual-address> (configuration/logical-systems/interfaces/ interface/unit/family/inet/address/vrrp-group)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>
              <address>
                <vrrp-group>
                  <virtual-address>
                    <name>name</name>    <!-- identifier -->
                  </virtual-address>
                </vrrp-group>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

**Description** One or more virtual IPv4 addresses.

**Contents** <name>—One or more virtual IPv4 addresses.

## **<virtual-address> (configuration/logical-systems/interfaces/interface/unit/family/inet6/address/vrrp-inet6-group)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <address>
                <vrrp-inet6-group>
                  <virtual-address>
                    <name>name</name>    <!-- identifier -->
                  </virtual-address>
                </vrrp-inet6-group>
              </address>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

**Description** One or more virtual IPv4 addresses.

**Contents** <name>—One or more virtual IPv4 addresses.

## **<virtual-channel-groups> (configuration/class-of-service)**

---

**Usage**

```

<configuration>
  <class-of-service>
    <virtual-channel-groups>
      <name>name</name>    <!-- identifier -->
      <channel>...</channel>
    </virtual-channel-groups>
  </class-of-service>
</configuration>

```

**Description** Define list of virtual channel groups.

**Contents** <channel>—Configure virtual channel for this group.

<name>—Virtual channel group name.

## **<virtual-channel-groups> (configuration/dynamic-profiles/class-of-service)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;dynamic-profiles&gt;     &lt;class-of-service&gt;       &lt;virtual-channel-groups&gt;         &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;         &lt;channel&gt;...&lt;/channel&gt;       &lt;/virtual-channel-groups&gt;     &lt;/class-of-service&gt;   &lt;/dynamic-profiles&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Define list of virtual channel groups.
<b>Contents</b>	<p>&lt;channel&gt;—Configure virtual channel for this group.</p> <p>&lt;name&gt;—Virtual channel group name.</p>

## **<virtual-channels> (configuration/class-of-service)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;class-of-service&gt;     &lt;virtual-channels&gt;       &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;     &lt;/virtual-channels&gt;   &lt;/class-of-service&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Define the list of virtual channels.
<b>Contents</b>	<name>—Virtual channel name.

## **<virtual-channels> (configuration/dynamic-profiles/class-of-service)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;dynamic-profiles&gt;     &lt;class-of-service&gt;       &lt;virtual-channels&gt;         &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;       &lt;/virtual-channels&gt;     &lt;/class-of-service&gt;   &lt;/dynamic-profiles&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Define the list of virtual channels.
<b>Contents</b>	<name>—Virtual channel name.

## **<virtual-inet6-address> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet/address/vrrp-group)**

---

**Usage**

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>
              <address>
                <vrrp-group>
                  <virtual-inet6-address>
                    <name>name</name>    <!-- identifier -->
                  </virtual-inet6-address>
                </vrrp-group>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

**Description** One or more virtual inet6 addresses.

**Contents** <name>—One or more virtual inet6 addresses.

## **<virtual-inet6-address> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet6/address/vrrp-inet6-group)**

---

**Usage**

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <address>
                <vrrp-inet6-group>
                  <virtual-inet6-address>
                    <name>name</name>    <!-- identifier -->
                  </virtual-inet6-address>
                </vrrp-inet6-group>
              </address>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

**Description** One or more virtual inet6 addresses.

**Contents** <name>—One or more virtual inet6 addresses.

## **<virtual-inet6-address> (configuration/interfaces/interface/unit/family/inet/address/vrrp-group)**

---

**Usage** <configuration>  
     <interfaces>  
         <interface>  
             <unit>  
                 <family>  
                     <inet>  
                         <address>  
                             <vrrp-group>  
                                 **<virtual-inet6-address>**  
                                     <name>name</name>   <!-- identifier -->  
                                 **</virtual-inet6-address>**  
                             </vrrp-group>  
                         </address>  
                     </inet>  
                 </family>  
     </unit>  
     </interface>  
     </interfaces>  
 </configuration>

**Description** One or more virtual inet6 addresses.

**Contents** <name>—One or more virtual inet6 addresses.

## **<virtual-inet6-address> (configuration/interfaces/interface/unit/family/inet6/address/vrrp-inet6-group)**

---

**Usage** <configuration>  
     <interfaces>  
         <interface>  
             <unit>  
                 <family>  
                     <inet6>  
                         <address>  
                             <vrrp-inet6-group>  
                                 **<virtual-inet6-address>**  
                                     <name>name</name>   <!-- identifier -->  
                                 **</virtual-inet6-address>**  
                             </vrrp-inet6-group>  
                         </address>  
                     </inet6>  
                 </family>  
     </unit>  
     </interface>  
     </interfaces>  
 </configuration>

**Description** One or more virtual inet6 addresses.

**Contents** <name>—One or more virtual inet6 addresses.

**<virtual-inet6-address> (configuration/logical-systems/  
interfaces/interface/unit/family/inet/address/vrrp-group)**

---

**Usage**   <configuration>  
          <logical-systems>  
          <interfaces>  
          <interface>  
          <unit>  
          <family>  
          <inet>  
          <address>  
          <vrrp-group>  
            **<virtual-inet6-address>**  
              <name>*name*</name>    <!-- identifier -->  
            **</virtual-inet6-address>**  
          </vrrp-group>  
          </address>  
          </inet>  
          </family>  
          </unit>  
          </interface>  
          </interfaces>  
          </logical-systems>  
          </configuration>

**Description**   One or more virtual inet6 addresses.

**Contents**   <name>—One or more virtual inet6 addresses.

## **<virtual-inet6-address> (configuration/logical-systems/interfaces/interface/unit/family/inet6/address/vrrp-inet6-group)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <address>
                <vrrp-inet6-group>
                  <virtual-inet6-address>
                    <name>name</name>    <!-- identifier -->
                  </virtual-inet6-address>
                </vrrp-inet6-group>
              </address>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

**Description** One or more virtual inet6 addresses.

**Contents** <name>—One or more virtual inet6 addresses.



**<virtual-interface> (configuration/services/pgcp)**

---

**Usage** <configuration>  
           <services>  
             <pgcp>  
               **<virtual-interface>**  
                 <name>*name*</name>   <!-- identifier -->  
                 <routing-instance>...</routing-instance>  
                 <service-state>*service-state-choice*</service-state>  
                 <media-service>...</media-service>   <!-- mandatory -->  
                 <interface>*interface*</interface>  
               **</virtual-interface>**  
             </pgcp>  
           </services>  
         </configuration>

**Description** One or more Virtual Interfaces.

**Contents** <interface>—Interface name.

<media-service>—No documentation is available yet.

<name>—Virtual Interface Name.

<routing-instance>—Routing instance.

<service-state>—Service state.

- in-service—Virtual Interface is operational.
- out-of-service-forced—Virtual Interface is nonoperational.
- out-of-service-graceful—Virtual Interface becomes nonoperational by draining.

## **<virtual-interface-down> (configuration/services/pgcp/gateway/h248-options/service-change/virtual-interface-indications)**

---

**Usage**

```

<configuration>
  <services>
    <pgcp>
      <gateway>
        <h248-options>
          <service-change>
            <virtual-interface-indications>
              <virtual-interface-down>
                <graceful>graceful-choice</graceful>
                <administrative>administrative-choice</administrative>
                <failure>failure-choice</failure>
                <link-loss>link-loss-choice</link-loss>
              </virtual-interface-down>
            </virtual-interface-indications>
          </service-change>
        </h248-options>
      </gateway>
    </pgcp>
  </services>
</configuration>

```

**Description** No documentation is available yet.

**Contents** <administrative>—Configure administrative service change.

- forced-905—Termination taken out of service.
- forced-906—Loss of lower layer connectivity.
- none—Suppress service change.

<failure>—Configure failure service change.

- forced-904—Termination malfunctioning.
- forced-906—Loss of lower layer connectivity.
- none—Suppress service change.

<graceful>—Configure graceful service change.

- graceful-905—Termination taken out of service.
- none—Suppress graceful-905 service change.

<link-loss>—Configure link-loss service change.

- forced-906—Loss of lower layer connectivity.
- none—Suppress forced-906 service change.

## **<virtual-interface-indications> (configuration/services/pgcp/gateway/h248-options/service-change)**

---

**Usage**   <configuration>  
               <services>  
                   <pgcp>  
                     <gateway>  
                       <h248-options>  
                         <service-change>  
                           **<virtual-interface-indications>**  
                             <virtual-interface-up>...</virtual-interface-up>  
                             <virtual-interface-down>...</virtual-interface-down>  
                           **</virtual-interface-indications>**  
                         </service-change>  
                       </h248-options>  
                     </gateway>  
                   </pgcp>  
               </services>  
             </configuration>

**Description**   Virtual interface indications.

**Contents**   <virtual-interface-down>—No documentation is available yet.

                  <virtual-interface-up>—No documentation is available yet.

## **<virtual-interface-up> (configuration/services/pgcp/gateway/h248-options/service-change/virtual-interface-indications)**

---

**Usage**

```

<configuration>
  <services>
    <pgcp>
      <gateway>
        <h248-options>
          <service-change>
            <virtual-interface-indications>
              <virtual-interface-up>
                <warm>warm-choice</warm>
                <cancel-graceful>cancel-graceful-choice</cancel-graceful>
              </virtual-interface-up>
            </virtual-interface-indications>
          </service-change>
        </h248-options>
      </gateway>
    </pgcp>
  </services>
</configuration>

```

**Description** No documentation is available yet.

**Contents** <cancel-graceful>—Configure cancel-graceful service change.

- none—Suppress restart-918 service change.
- restart-918—Cancel graceful.

<warm>—Configure warm-boot service change.

- none—Suppress restart-900 service change.
- restart-900—Service restored.

## <virtual-link> (configuration/logical-systems/protocols/ospf/area)

---

**Usage** <configuration>  
 <logical-systems>  
 <protocols>  
 <ospf>  
 <area>  
   **<virtual-link>**  
     <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
     <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
     <disable/>  
     <retransmit-interval>*retransmit-interval*</retransmit-interval>  
     <transit-delay>*transit-delay*</transit-delay>  
     <hello-interval>*hello-interval*</hello-interval>  
     <dead-interval>*dead-interval*</dead-interval>  
     <authentication>...</authentication>  
     <demand-circuit/>  
     <no-neighbor-down-notification/>  
     <ipsec-sa>*ipsec-sa*</ipsec-sa>  
     <topology>...</topology>  
   **</virtual-link>**  
 </area>  
 </ospf>  
 </protocols>  
 </logical-systems>  
 </configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).

## <virtual-link> (configuration/logical-systems/protocols/ospf3/area)

---

**Usage**

```

<configuration>
  <logical-systems>
    <protocols>
      <ospf3>
        <area>
          <virtual-link>
            <neighbor-id>neighbor-id</neighbor-id>    <!-- identifier -->
            <transit-area>transit-area</transit-area>  <!-- identifier -->
            <disable/>
            <retransmit-interval>retransmit-interval</retransmit-interval>
            <transit-delay>transit-delay</transit-delay>
            <hello-interval>hello-interval</hello-interval>
            <dead-interval>dead-interval</dead-interval>
            <authentication>...</authentication>
            <demand-circuit/>
            <no-neighbor-down-notification/>
            <ipsec-sa>ipsec-sa</ipsec-sa>
            <topology>...</topology>
          </virtual-link>
        </area>
      </ospf3>
    </protocols>
  </logical-systems>
</configuration>

```

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).

## <virtual-link> (configuration/logical-systems/protocols/ospf3/ realm/area)

---

**Usage** <configuration>  
           <logical-systems>  
           <protocols>  
           <ospf3>  
           <realm>  
           <area>  
             **<virtual-link>**  
               <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
               <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
               <disable/>  
               <retransmit-interval>*retransmit-interval*</retransmit-interval>  
               <transit-delay>*transit-delay*</transit-delay>  
               <hello-interval>*hello-interval*</hello-interval>  
               <dead-interval>*dead-interval*</dead-interval>  
               <authentication>...</authentication>  
               <demand-circuit/>  
               <no-neighbor-down-notification/>  
               <ipsec-sa>*ipsec-sa*</ipsec-sa>  
               <topology>...</topology>  
             **</virtual-link>**  
           </area>  
         </realm>  
       </ospf3>  
     </protocols>  
   </logical-systems>  
</configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).



## <virtual-link> (configuration/logical-systems/routing-instances/instance/protocols/ospf/area)

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <protocols>  
                     <ospf>  
                         <area>  
                             **<virtual-link>**  
                                 <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
                                 <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
                                 <disable/>  
                                 <retransmit-interval>*retransmit-interval*</retransmit-interval>  
                                 <transit-delay>*transit-delay*</transit-delay>  
                                 <hello-interval>*hello-interval*</hello-interval>  
                                 <dead-interval>*dead-interval*</dead-interval>  
                                 <authentication>...</authentication>  
                                 <demand-circuit/>  
                                 <no-neighbor-down-notification/>  
                                 <ipsec-sa>*ipsec-sa*</ipsec-sa>  
                                 <topology>...</topology>  
                             **</virtual-link>**  
                         </area>  
                 </ospf>  
             </protocols>  
         </instance>  
     </routing-instances>  
   </logical-systems>  
</configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).

## <virtual-link> (configuration/logical-systems/routing-instances/instance/protocols/ospf3/area)

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <protocols>  
                     <ospf3>  
                         <area>  
                             **<virtual-link>**  
                                 <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
                                 <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
                                 <disable/>  
                                 <retransmit-interval>*retransmit-interval*</retransmit-interval>  
                                 <transit-delay>*transit-delay*</transit-delay>  
                                 <hello-interval>*hello-interval*</hello-interval>  
                                 <dead-interval>*dead-interval*</dead-interval>  
                                 <authentication>...</authentication>  
                                 <demand-circuit/>  
                                 <no-neighbor-down-notification/>  
                                 <ipsec-sa>*ipsec-sa*</ipsec-sa>  
                                 <topology>...</topology>  
                             **</virtual-link>**  
                         </area>  
                 </ospf3>  
             </protocols>  
         </instance>  
     </routing-instances>  
   </logical-systems>  
</configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

`<topology>`—Topology specific attributes.

`<transit-area>`—Transit area in common with virtual neighbor.

`<transit-delay>`—Transit delay (seconds).

## <virtual-link> (configuration/logical-systems/routing-instances/instance/protocols/ospf3/realm/area)

---

**Usage** <configuration>  
 <logical-systems>  
 <routing-instances>  
 <instance>  
 <protocols>  
 <ospf3>  
 <realm>  
 <area>  
 <virtual-link>  
 <neighbor-id>*neighbor-id*</neighbor-id> <!-- identifier -->  
 <transit-area>*transit-area*</transit-area> <!-- identifier -->  
 <disable/>  
 <retransmit-interval>*retransmit-interval*</retransmit-interval>  
 <transit-delay>*transit-delay*</transit-delay>  
 <hello-interval>*hello-interval*</hello-interval>  
 <dead-interval>*dead-interval*</dead-interval>  
 <authentication>...</authentication>  
 <demand-circuit/>  
 <no-neighbor-down-notification/>  
 <ipsec-sa>*ipsec-sa*</ipsec-sa>  
 <topology>...</topology>  
 </virtual-link>  
 </area>  
 </realm>  
 </ospf3>  
 </protocols>  
 </instance>  
 </routing-instances>  
 </logical-systems>  
 </configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

`<topology>`—Topology specific attributes.

`<transit-area>`—Transit area in common with virtual neighbor.

`<transit-delay>`—Transit delay (seconds).

**<virtual-link> (configuration/protocols/ospf/area)**

---

**Usage** <configuration>  
 <protocols>  
 <ospf>  
 <area>  
   **<virtual-link>**  
     <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
     <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
     <disable/>  
     <retransmit-interval>*retransmit-interval*</retransmit-interval>  
     <transit-delay>*transit-delay*</transit-delay>  
     <hello-interval>*hello-interval*</hello-interval>  
     <dead-interval>*dead-interval*</dead-interval>  
     <authentication>...</authentication>  
     <demand-circuit/>  
     <no-neighbor-down-notification/>  
     <ipsec-sa>*ipsec-sa*</ipsec-sa>  
     <topology>...</topology>  
   **</virtual-link>**  
 </area>  
</ospf>  
</protocols>  
</configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).

**<virtual-link> (configuration/protocols/ospf3/area)**

---

**Usage** <configuration>  
 <protocols>  
 <ospf3>  
 <area>  
   **<virtual-link>**  
     <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
     <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
     <disable/>  
     <retransmit-interval>*retransmit-interval*</retransmit-interval>  
     <transit-delay>*transit-delay*</transit-delay>  
     <hello-interval>*hello-interval*</hello-interval>  
     <dead-interval>*dead-interval*</dead-interval>  
     <authentication>...</authentication>  
     <demand-circuit/>  
     <no-neighbor-down-notification/>  
     <ipsec-sa>*ipsec-sa*</ipsec-sa>  
     <topology>...</topology>  
   **</virtual-link>**  
 </area>  
</ospf3>  
</protocols>  
</configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).



**<virtual-link> (configuration/protocols/ospf3/realm/area)**

---

**Usage** <configuration>  
 <protocols>  
 <ospf3>  
 <realm>  
 <area>  
   **<virtual-link>**  
     <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
     <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
     <disable/>  
     <retransmit-interval>*retransmit-interval*</retransmit-interval>  
     <transit-delay>*transit-delay*</transit-delay>  
     <hello-interval>*hello-interval*</hello-interval>  
     <dead-interval>*dead-interval*</dead-interval>  
     <authentication>...</authentication>  
     <demand-circuit/>  
     <no-neighbor-down-notification/>  
     <ipsec-sa>*ipsec-sa*</ipsec-sa>  
     <topology>...</topology>  
   **</virtual-link>**  
 </area>  
 </realm>  
 </ospf3>  
 </protocols>  
 </configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).

## <virtual-link> (configuration/routing-instances/instance/protocols/ospf/area)

---

**Usage**

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <area>
            <virtual-link>
              <neighbor-id>neighbor-id</neighbor-id>    <!-- identifier -->
              <transit-area>transit-area</transit-area>  <!-- identifier -->
              <disable/>
              <retransmit-interval>retransmit-interval</retransmit-interval>
              <transit-delay>transit-delay</transit-delay>
              <hello-interval>hello-interval</hello-interval>
              <dead-interval>dead-interval</dead-interval>
              <authentication>...</authentication>
              <demand-circuit/>
              <no-neighbor-down-notification/>
              <ipsec-sa>ipsec-sa</ipsec-sa>
              <topology>...</topology>
            </virtual-link>
          </area>
        </ospf>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).

## <virtual-link> (configuration/routing-instances/instance/protocols/ospf3/area)

---

**Usage**

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf3>
          <area>
            <virtual-link>
              <neighbor-id>neighbor-id</neighbor-id>    <!-- identifier -->
              <transit-area>transit-area</transit-area>  <!-- identifier -->
              <disable/>
              <retransmit-interval>retransmit-interval</retransmit-interval>
              <transit-delay>transit-delay</transit-delay>
              <hello-interval>hello-interval</hello-interval>
              <dead-interval>dead-interval</dead-interval>
              <authentication>...</authentication>
              <demand-circuit/>
              <no-neighbor-down-notification/>
              <ipsec-sa>ipsec-sa</ipsec-sa>
              <topology>...</topology>
            </virtual-link>
          </area>
        </ospf3>
      </protocols>
    </instance>
  </routing-instances>
</configuration>

```

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

<topology>—Topology specific attributes.

<transit-area>—Transit area in common with virtual neighbor.

<transit-delay>—Transit delay (seconds).

## **<virtual-link> (configuration/routing-instances/instance/protocols/ospf3/realm/area)**

---

**Usage** <configuration>  
 <routing-instances>  
 <instance>  
 <protocols>  
 <ospf3>  
 <realm>  
 <area>  
**<virtual-link>**  
 <neighbor-id>*neighbor-id*</neighbor-id> <!-- identifier -->  
 <transit-area>*transit-area*</transit-area> <!-- identifier -->  
 <disable/>  
 <retransmit-interval>*retransmit-interval*</retransmit-interval>  
 <transit-delay>*transit-delay*</transit-delay>  
 <hello-interval>*hello-interval*</hello-interval>  
 <dead-interval>*dead-interval*</dead-interval>  
 <authentication>...</authentication>  
 <demand-circuit/>  
 <no-neighbor-down-notification/>  
 <ipsec-sa>*ipsec-sa*</ipsec-sa>  
 <topology>...</topology>  
**</virtual-link>**  
 </area>  
 </realm>  
 </ospf3>  
 </protocols>  
 </instance>  
 </routing-instances>  
 </configuration>

**Description** Configure virtual links.

**Contents** <authentication>—No documentation is available yet.

<dead-interval>—Dead interval (seconds).

<demand-circuit>—Interface functions as a demand circuit.

<disable>—Disable this virtual link.

<hello-interval>—Hello interval (seconds).

<ipsec-sa>—IPSec security association name.

<neighbor-id>—Router ID of a virtual neighbor.

<no-neighbor-down-notification>—Don't inform other protocols about neighbor down events.

<retransmit-interval>—Retransmission interval (seconds).

- <topology>—Topology specific attributes.
- <transit-area>—Transit area in common with virtual neighbor.
- <transit-delay>—Transit delay (seconds).

**<virtual-network> (configuration/services/mobile-ip/home-agent)**

---

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;services&gt;     &lt;mobile-ip&gt;       &lt;home-agent&gt;         <b>&lt;virtual-network&gt;</b>           &lt;home-agent-address&gt;...&lt;/home-agent-address&gt;         <b>&lt;/virtual-network&gt;</b>       &lt;/home-agent&gt;     &lt;/mobile-ip&gt;   &lt;/services&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Virtual Network home-agent address.
<b>Contents</b>	<home-agent-address>—Select home-agent virtual IP address.

## <vlan> (configuration/bridge-domains/domain/protocols/igmp-snooping)

---

**Usage**

```

<configuration>
  <bridge-domains>
    <domain>
      <protocols>
        <igmp-snooping>
          <vlan>
            <name>name</name>    <!-- identifier -->
            <query-interval>seconds</query-interval>
            <query-response-interval>seconds</query-response-interval>
            <query-last-member-interval>seconds</query-last-member-interval>
            <robust-count>robust-count</robust-count>
            <immediate-leave/>
            <proxy>...</proxy>
            <interface>...</interface>
          </vlan>
        </igmp-snooping>
      </protocols>
    </domain>
  </bridge-domains>
</configuration>

```

**Description** Vlan options.

**Contents**

- <immediate-leave>—Enable immediate group leave on interfaces.
- <interface>—Interface options for IGMP.
- <name>—Vlan\_id of the learning-domain.
- <proxy>—Enable proxy mode.
- <query-interval>—When to send host query messages.
- <query-last-member-interval>—When to send group query messages.
- <query-response-interval>—How long to wait for a host query response.
- <robust-count>—Expected packet loss on a subnet.



## **<vlan> (configuration/dynamic-profiles/interfaces/interface/unit/family/ethernet-switching)**

---

**Usage** <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           <ethernet-switching>  
           **<vlan>**  
             <members>...</members>  
           **</vlan>**  
           </ethernet-switching>  
           </family>  
           </unit>  
           </interface>  
           </interfaces>  
           </dynamic-profiles>  
           </configuration>

**Description** Virtual LAN parameters.

**Contents** <members>—Membership for this interface (name or id).

## **<vlan> (configuration/firewall/family/ethernet-switching/filter/term/from)**

---

**Usage** <configuration>  
           <firewall>  
           <family>  
           <ethernet-switching>  
           <filter>  
           <term>  
           <from>  
           **<vlan>**  
             <name>name</name>   <!-- identifier -->  
           **</vlan>**  
           </from>  
           </term>  
           </filter>  
           </ethernet-switching>  
           </family>  
           </firewall>  
           </configuration>

**Description** Match Vlan Id or Name.

**Contents** <name>—VLAN name or ID.

## <vlan> (configuration/interfaces/interface/unit/family/ethernet-switching)

---

**Usage** <configuration>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           <ethernet-switching>  
           **<vlan>**  
             <members>...</members>  
           **</vlan>**  
           </ethernet-switching>  
           </family>  
           </unit>  
           </interface>  
           </interfaces>  
         </configuration>

**Description** Virtual LAN parameters.

**Contents** <members>—Membership for this interface (name or id).

## <vlan> (configuration/logical-systems/firewall/family/ethernet-switching/filter/term/from)

---

**Usage** <configuration>  
           <logical-systems>  
           <firewall>  
           <family>  
           <ethernet-switching>  
           <filter>  
           <term>  
           <from>  
           **<vlan>**  
             <name>name</name>   <!-- identifier -->  
           **</vlan>**  
           </from>  
           </term>  
           </filter>  
           </ethernet-switching>  
           </family>  
           </firewall>  
           </logical-systems>  
         </configuration>

**Description** Match Vlan Id or Name.

**Contents** <name>—VLAN name or ID.

## **<vlan> (configuration/logical-systems/interfaces/interface/unit/family/ethernet-switching)**

---

**Usage** <configuration>  
           <logical-systems>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           <ethernet-switching>  
           **<vlan>**  
           <members>...</members>  
           **</vlan>**  
           </ethernet-switching>  
           </family>  
           </unit>  
           </interface>  
           </interfaces>  
           </logical-systems>  
           </configuration>

**Description** Virtual LAN parameters.

**Contents** <members>—Membership for this interface (name or id).

## **<vlan> (configuration/logical-systems/protocols/mstp/msti)**

---

**Usage** <configuration>  
           <logical-systems>  
           <protocols>  
           <mstp>  
           <msti>  
           **<vlan>**  
           <name>name</name>   <!-- identifier -->  
           **</vlan>**  
           </msti>  
           </mstp>  
           </protocols>  
           </logical-systems>  
           </configuration>

**Description** VLAN ID or VLAN ID range [1..4094].

**Contents** <name>—VLAN ID or VLAN ID range [1..4094].

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

---

**Usage** <configuration>  
           <logical-systems>  
           <protocols>  
           <vstp>  
           **<vlan>**  
             <name>name</name>   <!-- identifier -->  
             <bridge-priority>bridge-priority</bridge-priority>  
             <max-age>seconds</max-age>  
             <hello-time>seconds</hello-time>  
             <forward-delay>seconds</forward-delay>  
             <traceoptions>...</traceoptions>  
             <interface>...</interface>  
           **</vlan>**  
           </vstp>  
           </protocols>  
           </logical-systems>  
         </configuration>

**Description** VLAN spanning tree options.

**Contents** <bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k).

<forward-delay>—Time spent in listening or learning state.

<hello-time>—Time interval between configuration BPDUs.

<interface>—Interface options.

<max-age>—Maximum age of received protocol bpdu.

<name>—VLAN identifier.

<traceoptions>—Tracing options for debugging protocol operation.

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

---

**Usage** <configuration>  
 <logical-systems>  
 <routing-instances>  
 <instance>  
 <bridge-domains>  
 <domain>  
 <protocols>  
 <igmp-snooping>  
 <vlan>  
 <name>*name*</name> <!-- identifier -->  
 <query-interval>*seconds*</query-interval>  
 <query-response-interval>*seconds*</query-response-interval>  
 <query-last-member-interval>*seconds*</query-last-member-interval>  
 <robust-count>*robust-count*</robust-count>  
 <immediate-leave/>  
 <proxy>...</proxy>  
 <interface>...</interface>  
 </vlan>  
 </igmp-snooping>  
 </protocols>  
 </domain>  
 </bridge-domains>  
 </instance>  
 </routing-instances>  
 </logical-systems>  
 </configuration>

**Description** Vlan options.

**Contents** <immediate-leave>—Enable immediate group leave on interfaces.

<interface>—Interface options for IGMP.

<name>—Vlan\_id of the learning-domain.

<proxy>—Enable proxy mode.

<query-interval>—When to send host query messages.

<query-last-member-interval>—When to send group query messages.

<query-response-interval>—How long to wait for a host query response.

<robust-count>—Expected packet loss on a subnet.

## <vlan> (configuration/logical-systems/routing-instances/instance/protocols/igmp-snooping)

---

**Usage**

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <igmp-snooping>
            <vlan>
              <name>name</name>    <!-- identifier -->
              <query-interval>seconds</query-interval>
              <query-response-interval>seconds</query-response-interval>
              <query-last-member-interval>seconds</query-last-member-interval>
              <robust-count>robust-count</robust-count>
              <immediate-leave/>
              <proxy>...</proxy>
              <interface>...</interface>
            </vlan>
          </igmp-snooping>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

**Description** Vlan options.

**Contents**

- <immediate-leave>—Enable immediate group leave on interfaces.
- <interface>—Interface options for IGMP.
- <name>—Vlan\_id of the learning-domain.
- <proxy>—Enable proxy mode.
- <query-interval>—When to send host query messages.
- <query-last-member-interval>—When to send group query messages.
- <query-response-interval>—How long to wait for a host query response.
- <robust-count>—Expected packet loss on a subnet.

**<vlan> (configuration/logical-systems/routing-instances/  
instance/protocols/mstp/msti)**

---

**Usage**   <configuration>  
          <logical-systems>  
          <routing-instances>  
          <instance>  
          <protocols>  
          <mstp>  
          <msti>  
          **<vlan>**  
          <name>*name*</name>   <!-- identifier -->  
          **</vlan>**  
          </msti>  
          </mstp>  
          </protocols>  
          </instance>  
          </routing-instances>  
          </logical-systems>  
          </configuration>

**Description**   VLAN ID or VLAN ID range [1..4094].

**Contents**   <name>—VLAN ID or VLAN ID range [1..4094].

## <vlan> (configuration/logical-systems/routing-instances/instance/protocols/vstp)

---

**Usage**

```

<configuration>
  <logical-systems>
    <routing-instances>
      <instance>
        <protocols>
          <vstp>
            <vlan>
              <name>name</name>    <!-- identifier -->
              <bridge-priority>bridge-priority</bridge-priority>
              <max-age>seconds</max-age>
              <hello-time>seconds</hello-time>
              <forward-delay>seconds</forward-delay>
              <traceoptions>...</traceoptions>
              <interface>...</interface>
            </vlan>
          </vstp>
        </protocols>
      </instance>
    </routing-instances>
  </logical-systems>
</configuration>

```

**Description** VLAN spanning tree options.

**Contents** <bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k).

<forward-delay>—Time spent in listening or learning state.

<hello-time>—Time interval between configuration BPDUs.

<interface>—Interface options.

<max-age>—Maximum age of received protocol bpdu.

<name>—VLAN identifier.

<traceoptions>—Tracing options for debugging protocol operation.



**<vlan> (configuration/protocols/mstp/msti)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;protocols&gt;     &lt;mstp&gt;       &lt;msti&gt;         &lt;vlan&gt;           &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;         &lt;/vlan&gt;       &lt;/msti&gt;     &lt;/mstp&gt;   &lt;/protocols&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VLAN ID or VLAN ID range [1..4094].
<b>Contents</b>	<name>—VLAN ID or VLAN ID range [1..4094].

**<vlan> (configuration/protocols/vstp)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;protocols&gt;     &lt;vstp&gt;       &lt;vlan&gt;         &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;         &lt;bridge-priority&gt;bridge-priority&lt;/bridge-priority&gt;         &lt;max-age&gt;seconds&lt;/max-age&gt;         &lt;hello-time&gt;seconds&lt;/hello-time&gt;         &lt;forward-delay&gt;seconds&lt;/forward-delay&gt;         &lt;traceoptions&gt;...&lt;/traceoptions&gt;         &lt;interface&gt;...&lt;/interface&gt;       &lt;/vlan&gt;     &lt;/vstp&gt;   &lt;/protocols&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VLAN spanning tree options.
<b>Contents</b>	<p>&lt;bridge-priority&gt;—Priority of the bridge (in increments of 4k - 0,4k,8k,..60k).</p> <p>&lt;forward-delay&gt;—Time spent in listening or learning state.</p> <p>&lt;hello-time&gt;—Time interval between configuration BPDUs.</p> <p>&lt;interface&gt;—Interface options.</p> <p>&lt;max-age&gt;—Maximum age of received protocol bpdu.</p> <p>&lt;name&gt;—VLAN identifier.</p> <p>&lt;traceoptions&gt;—Tracing options for debugging protocol operation.</p>

## <vlan> (configuration/routing-instances/instance/bridge-domains/domain/protocols/igmp-snooping)

---

**Usage**

```

<configuration>
  <routing-instances>
    <instance>
      <bridge-domains>
        <domain>
          <protocols>
            <igmp-snooping>
              <vlan>
                <name>name</name>    <!-- identifier -->
                <query-interval>seconds</query-interval>
                <query-response-interval>seconds</query-response-interval>
                <query-last-member-interval>seconds</query-last-member-interval>
                <robust-count>robust-count</robust-count>
                <immediate-leave/>
                <proxy>...</proxy>
                <interface>...</interface>
              </vlan>
            </igmp-snooping>
          </protocols>
        </domain>
      </bridge-domains>
    </instance>
  </routing-instances>
</configuration>

```

**Description** Vlan options.

**Contents**

- <immediate-leave>—Enable immediate group leave on interfaces.
- <interface>—Interface options for IGMP.
- <name>—Vlan\_id of the learning-domain.
- <proxy>—Enable proxy mode.
- <query-interval>—When to send host query messages.
- <query-last-member-interval>—When to send group query messages.
- <query-response-interval>—How long to wait for a host query response.
- <robust-count>—Expected packet loss on a subnet.

## <vlan> (configuration/routing-instances/instance/protocols/igmp-snooping)

---

**Usage** <configuration>  
     <routing-instances>  
         <instance>  
             <protocols>  
                 <igmp-snooping>  
                     <vlan>  
                         <name>name</name>   <!-- identifier -->  
                         <query-interval>seconds</query-interval>  
                         <query-response-interval>seconds</query-response-interval>  
                         <query-last-member-interval>seconds</query-last-member-interval>  
                         <robust-count>robust-count</robust-count>  
                         <immediate-leave/>  
                         <proxy>...</proxy>  
                         <interface>...</interface>  
                     </vlan>  
                 </igmp-snooping>  
             </protocols>  
         </instance>  
     </routing-instances>  
</configuration>

**Description** Vlan options.

**Contents** <immediate-leave>—Enable immediate group leave on interfaces.

<interface>—Interface options for IGMP.

<name>—Vlan\_id of the learning-domain.

<proxy>—Enable proxy mode.

<query-interval>—When to send host query messages.

<query-last-member-interval>—When to send group query messages.

<query-response-interval>—How long to wait for a host query response.

<robust-count>—Expected packet loss on a subnet.

**<vlan> (configuration/routing-instances/instance/protocols/mstp/msti)**

---

**Usage**   <configuration>  
          <routing-instances>  
          <instance>  
          <protocols>  
          <mstp>  
          <msti>  
          **<vlan>**  
            <name>name</name>   <!-- identifier -->  
          **</vlan>**  
          </msti>  
          </mstp>  
          </protocols>  
          </instance>  
          </routing-instances>  
          </configuration>

**Description**   VLAN ID or VLAN ID range [1..4094].

**Contents**   <name>—VLAN ID or VLAN ID range [1..4094].

**<vlan> (configuration/routing-instances/instance/protocols/vstp)**

---

**Usage** <configuration>  
           <routing-instances>  
             <instance>  
               <protocols>  
                 <vstp>  
                   **<vlan>**  
                     <name>*name*</name>   <!-- identifier -->  
                     <bridge-priority>*bridge-priority*</bridge-priority>  
                     <max-age>*seconds*</max-age>  
                     <hello-time>*seconds*</hello-time>  
                     <forward-delay>*seconds*</forward-delay>  
                     <traceoptions>...</traceoptions>  
                     <interface>...</interface>  
                   **</vlan>**  
                 </vstp>  
               </protocols>  
             </instance>  
           </routing-instances>  
         </configuration>

**Description** VLAN spanning tree options.

**Contents** <bridge-priority>—Priority of the bridge (in increments of 4k - 0,4k,8k,...60k).

<forward-delay>—Time spent in listening or learning state.

<hello-time>—Time interval between configuration BPDUs.

<interface>—Interface options.

<max-age>—Maximum age of received protocol bpdu.

<name>—VLAN identifier.

<traceoptions>—Tracing options for debugging protocol operation.

## <vlan-ether-type> (configuration/firewall/family/bridge/filter/term/from)

---

**Usage**

```

<configuration>
  <firewall>
    <family>
      <bridge>
        <filter>
          <term>
            <from>
              <vlan-ether-type>
                <name>name</name>    <!-- identifier -->
              </vlan-ether-type>
            </from>
          </term>
        </filter>
      </bridge>
    </family>
  </firewall>
</configuration>

```

**Description** Match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resoulution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.

## **<vlan-ether-type> (configuration/firewall/family/vpls/filter/term/from)**

---

**Usage** <configuration>  
           <firewall>  
           <family>  
           <vpls>  
           <filter>  
           <term>  
           <from>  
               **<vlan-ether-type>**  
                   <name>*name*</name>   <!-- identifier -->  
               **</vlan-ether-type>**  
           </from>  
           </term>  
           </filter>  
           </vpls>  
           </family>  
           </firewall>  
         </configuration>

**Description** Match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resoulution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.

## **<vlan-ether-type> (configuration/logical-systems/firewall/family/bridge/filter/term/from)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <firewall>
      <family>
        <bridge>
          <filter>
            <term>
              <from>
                <vlan-ether-type>
                  <name>name</name>    <!-- identifier -->
                </vlan-ether-type>
              </from>
            </term>
          </filter>
        </bridge>
      </family>
    </firewall>
  </logical-systems>
</configuration>

```

**Description** Match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resolution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.



## **<vlan-ether-type> (configuration/logical-systems/firewall/family/vpls/filter/term/from)**

---

**Usage** <configuration>  
           <logical-systems>  
           <firewall>  
           <family>  
           <vpls>  
           <filter>  
           <term>  
           <from>  
               **<vlan-ether-type>**  
                   <name>*name*</name>   <!-- identifier -->  
               **</vlan-ether-type>**  
           </from>  
           </term>  
           </filter>  
           </vpls>  
           </family>  
           </firewall>  
           </logical-systems>  
           </configuration>

**Description** Match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resolution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.

## **<vlan-ether-type-except> (configuration/firewall/family/bridge/filter/term/from)**

---

**Usage**

```

<configuration>
  <firewall>
    <family>
      <bridge>
        <filter>
          <term>
            <from>
              <vlan-ether-type-except>
                <name>name</name>    <!-- identifier -->
              </vlan-ether-type-except>
            </from>
          </term>
        </filter>
      </bridge>
    </family>
  </firewall>
</configuration>

```

**Description** Do not match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resoulution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.

## **<vlan-ether-type-except> (configuration/firewall/family/vpls/filter/term/from)**

---

**Usage** <configuration>  
           <firewall>  
           <family>  
           <vpls>  
           <filter>  
           <term>  
           <from>  
               **<vlan-ether-type-except>**  
                   <name>*name*</name>   <!-- identifier -->  
               **</vlan-ether-type-except>**  
           </from>  
           </term>  
           </filter>  
           </vpls>  
           </family>  
           </firewall>  
         </configuration>

**Description** Do not match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resolution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.

## **<vlan-ether-type-except> (configuration/logical-systems/firewall/family/bridge/filter/term/from)**

---

**Usage**

```

<configuration>
  <logical-systems>
    <firewall>
      <family>
        <bridge>
          <filter>
            <term>
              <from>
                <vlan-ether-type-except>
                  <name>name</name>    <!-- identifier -->
                </vlan-ether-type-except>
              </from>
            </term>
          </filter>
        </bridge>
      </family>
    </firewall>
  </logical-systems>
</configuration>

```

**Description** Do not match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resolution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.

## **<vlan-ether-type-except> (configuration/logical-systems/firewall/family/vpls/filter/term/from)**

---

**Usage** <configuration>  
           <logical-systems>  
           <firewall>  
           <family>  
           <vpls>  
           <filter>  
           <term>  
           <from>  
               **<vlan-ether-type-except>**  
                   <name>*name*</name>   <!-- identifier -->  
               **</vlan-ether-type-except>**  
           </from>  
           </term>  
           </filter>  
           </vpls>  
           </family>  
           </firewall>  
           </logical-systems>  
         </configuration>

**Description** Do not match VLAN Ethernet type.

**Contents** <name>—No documentation is available yet.

- aarp—AppleTalk AARP.
- appletalk—AppleTalk.
- arp—Address Resolution Protocol.
- ipv4—Internet Protocol version 4.
- ipv6—Internet Protocol version 6.
- mpls-multicast—MPLS Multicast.
- mpls-unicast—MPLS Unicast.
- oam—Ethernet OAM.
- ppp—Point-to-point protocol.
- pppoe-discovery—PPPoE Discovery stage.
- pppoe-session—PPPoE Session stage.
- range—Range of values.
- sna—IBM SNA Service on Ether.
- vlan—VLAN Tag Protocol Identifier.

## <vlan-except> (configuration/firewall/family/ethernet-switching/filter/term/from)

---

**Usage** <configuration>  
     <firewall>  
         <family>  
             <ethernet-switching>  
                 <filter>  
                     <term>  
                         <from>  
                             <b><vlan-except></b>  
                                 <name>name</name>   <!-- identifier -->  
                             <b></vlan-except></b>  
                         </from>  
                     </term>  
                 </filter>  
             </ethernet-switching>  
         </family>  
     </firewall>  
 </configuration>

**Description** Do not match Vlan Id or Name.

**Contents** <name>—VLAN name or ID.

## <vlan-except> (configuration/logical-systems/firewall/family/ethernet-switching/filter/term/from)

---

**Usage** <configuration>  
     <logical-systems>  
         <firewall>  
             <family>  
                 <ethernet-switching>  
                     <filter>  
                         <term>  
                             <from>  
                                 <b><vlan-except></b>  
                                     <name>name</name>   <!-- identifier -->  
                                 <b></vlan-except></b>  
                             </from>  
                         </term>  
                     </filter>  
                 </ethernet-switching>  
             </family>  
         </firewall>  
     </logical-systems>  
 </configuration>

**Description** Do not match Vlan Id or Name.

**Contents** <name>—VLAN name or ID.

## **<vlan-id> (configuration/bridge-domains/domain/bridge-options/interface/static-mac)**

---

**Usage** <configuration>  
     <bridge-domains>  
         <domain>  
             <bridge-options>  
                 <interface>  
                     <static-mac>  
                         **<vlan-id>**  
                             <name>*name*</name>   <!-- identifier -->  
                         **</vlan-id>**  
                     </static-mac>  
                 </interface>  
             </bridge-options>  
         </domain>  
     </bridge-domains>  
 </configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

## **<vlan-id> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain/bridge-options/interface/static-mac)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <bridge-domains>  
                     <domain>  
                         <bridge-options>  
                             <interface>  
                                 <static-mac>  
                                     **<vlan-id>**  
   <name>*name*</name>   <!-- identifier -->  
                                     **</vlan-id>**  
                                 </static-mac>  
                             </interface>  
                         </bridge-options>  
                     </domain>  
                 </bridge-domains>  
             </instance>  
         </routing-instances>  
     </logical-systems>  
 </configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

**<vlan-id> (configuration/logical-systems/routing-instances/  
instance/protocols/l2vpn/interface/static-mac)**

---

**Usage**   <configuration>  
          <logical-systems>  
          <routing-instances>  
          <instance>  
          <protocols>  
          <l2vpn>  
          <interface>  
          <static-mac>  
          **<vlan-id>**  
          <name>name</name>   <!-- identifier -->  
          **</vlan-id>**  
          </static-mac>  
          </interface>  
          </l2vpn>  
          </protocols>  
          </instance>  
          </routing-instances>  
          </logical-systems>  
          </configuration>

**Description**   VLAN ID of learning VLAN.

**Contents**   <name>—Learning VLAN.



**<vlan-id> (configuration/logical-systems/routing-instances/  
instance/protocols/l2vpn/site/interface/static-mac)**

---

```
Usage  <configuration>
      <logical-systems>
      <routing-instances>
      <instance>
      <protocols>
      <l2vpn>
      <site>
      <interface>
      <static-mac>
      <vlan-id>
      <name>name</name>    <!-- identifier -->
      </vlan-id>
      </static-mac>
      </interface>
      </site>
      </l2vpn>
      </protocols>
      </instance>
      </routing-instances>
      </logical-systems>
      </configuration>
```

**Description**    VLAN ID of learning VLAN.

**Contents**       <name>—Learning VLAN.

**<vlan-id> (configuration/logical-systems/routing-instances/  
instance/protocols/vpls/interface/static-mac)**

---

**Usage**   <configuration>  
          <logical-systems>  
          <routing-instances>  
          <instance>  
          <protocols>  
          <vpls>  
          <interface>  
          <static-mac>  
          **<vlan-id>**  
          <name>name</name>   <!-- identifier -->  
          **</vlan-id>**  
          </static-mac>  
          </interface>  
          </vpls>  
          </protocols>  
          </instance>  
          </routing-instances>  
          </logical-systems>  
          </configuration>

**Description**   VLAN ID of learning VLAN.

**Contents**    <name>—Learning VLAN.

## **<vlan-id> (configuration/logical-systems/routing-instances/ instance/protocols/vpls/site/interface/static-mac)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <protocols>  
                     <vpls>  
                         <site>  
                             <interface>  
                                 <static-mac>  
                                     **<vlan-id>**  
   <name>name</name>   <!-- identifier -->  
                                     **</vlan-id>**  
                                 </static-mac>  
                     </interface>  
                 </site>  
             </vpls>  
         </protocols>  
     </instance>  
   </routing-instances>  
</logical-systems>  
</configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

## **<vlan-id> (configuration/logical-systems/routing-instances/ instance/switch-options/interface/static-mac)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <switch-options>  
                     <interface>  
                         <static-mac>  
                             **<vlan-id>**  
                                 <name>name</name>   <!-- identifier -->  
                             **</vlan-id>**  
                         </static-mac>  
             </interface>  
         </switch-options>  
     </instance>  
   </routing-instances>  
</logical-systems>  
</configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

## **<vlan-id> (configuration/routing-instances/instance/bridge-domains/domain/bridge-options/interface/static-mac)**

---

**Usage** <configuration>  
 <routing-instances>  
 <instance>  
 <bridge-domains>  
 <domain>  
 <bridge-options>  
 <interface>  
 <static-mac>  
   **<vlan-id>**  
     <name>name</name>   <!-- identifier -->  
   **</vlan-id>**  
 </static-mac>  
 </interface>  
 </bridge-options>  
 </domain>  
 </bridge-domains>  
 </instance>  
 </routing-instances>  
 </configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

## **<vlan-id> (configuration/routing-instances/instance/protocols/l2vpn/interface/static-mac)**

---

**Usage** <configuration>  
 <routing-instances>  
 <instance>  
 <protocols>  
 <l2vpn>  
 <interface>  
 <static-mac>  
   **<vlan-id>**  
     <name>name</name>   <!-- identifier -->  
   **</vlan-id>**  
 </static-mac>  
 </interface>  
 </l2vpn>  
 </protocols>  
 </instance>  
 </routing-instances>  
 </configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

**<vlan-id> (configuration/routing-instances/instance/protocols/l2vpn/site/interface/static-mac)**

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;routing-instances&gt;     &lt;instance&gt;       &lt;protocols&gt;         &lt;l2vpn&gt;           &lt;site&gt;             &lt;interface&gt;               &lt;static-mac&gt;                 &lt;vlan-id&gt;                   &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;                 &lt;/vlan-id&gt;               &lt;/static-mac&gt;             &lt;/interface&gt;           &lt;/site&gt;         &lt;/l2vpn&gt;       &lt;/protocols&gt;     &lt;/instance&gt;   &lt;/routing-instances&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VLAN ID of learning VLAN.
<b>Contents</b>	<name>—Learning VLAN.

**<vlan-id> (configuration/routing-instances/instance/protocols/vpls/interface/static-mac)**

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;routing-instances&gt;     &lt;instance&gt;       &lt;protocols&gt;         &lt;vpls&gt;           &lt;interface&gt;             &lt;static-mac&gt;               &lt;vlan-id&gt;                 &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;               &lt;/vlan-id&gt;             &lt;/static-mac&gt;           &lt;/interface&gt;         &lt;/vpls&gt;       &lt;/protocols&gt;     &lt;/instance&gt;   &lt;/routing-instances&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VLAN ID of learning VLAN.
<b>Contents</b>	<name>—Learning VLAN.

## **<vlan-id> (configuration/routing-instances/instance/protocols/vpls/site/interface/static-mac)**

---

**Usage** <configuration>  
 <routing-instances>  
 <instance>  
 <protocols>  
 <vpls>  
 <site>  
 <interface>  
 <static-mac>  
   **<vlan-id>**  
     <name>name</name>   <!-- identifier -->  
   **</vlan-id>**  
 </static-mac>  
 </interface>  
 </site>  
 </vpls>  
 </protocols>  
 </instance>  
 </routing-instances>  
 </configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

## **<vlan-id> (configuration/routing-instances/instance/switch-options/interface/static-mac)**

---

**Usage** <configuration>  
 <routing-instances>  
 <instance>  
 <switch-options>  
 <interface>  
 <static-mac>  
   **<vlan-id>**  
     <name>name</name>   <!-- identifier -->  
   **</vlan-id>**  
 </static-mac>  
 </interface>  
 </switch-options>  
 </instance>  
 </routing-instances>  
 </configuration>

**Description** VLAN ID of learning VLAN.

**Contents** <name>—Learning VLAN.

**<vlan-id-list> (configuration/bridge-domains/domain)**

---

**Usage** <configuration>  
           <bridge-domains>  
           <domain>  
             **<vlan-id-list>**  
               <name>*name*</name>   <!-- identifier -->  
             **</vlan-id-list>**  
           </domain>  
         </bridge-domains>  
       </configuration>

**Description** Specify vlans for which auto vlan will be created.

**Contents** <name>—Specify vlans for which auto vlan will be created.

**<vlan-id-list> (configuration/dynamic-profiles/interfaces/interface/unit/family/bridge)**

---

**Usage** <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           <bridge>  
             **<vlan-id-list>**  
               <name>*name*</name>   <!-- identifier -->  
             **</vlan-id-list>**  
           </bridge>  
         </family>  
       </unit>  
     </interface>  
 </interfaces>  
</dynamic-profiles>  
</configuration>

**Description** Trunk mode VLAN membership for this interface.

**Contents** <name>—Trunk mode VLAN membership for this interface.

## **<vlan-id-list> (configuration/interfaces/interface/unit/family/bridge)**

---

**Usage** <configuration>  
           <interfaces>  
             <interface>  
               <unit>  
                 <family>  
                   <bridge>  
                     **<vlan-id-list>**  
                       <name>*name*</name>   <!-- identifier -->  
                     **</vlan-id-list>**  
                   </bridge>  
                 </family>  
               </unit>  
             </interface>  
           </interfaces>  
         </configuration>

**Description** Trunk mode VLAN membership for this interface.

**Contents** <name>—Trunk mode VLAN membership for this interface.

## **<vlan-id-list> (configuration/logical-systems/interfaces/interface/unit/family/bridge)**

---

**Usage** <configuration>  
           <logical-systems>  
             <interfaces>  
               <interface>  
                 <unit>  
                   <family>  
                     <bridge>  
                       **<vlan-id-list>**  
                       <name>*name*</name>   <!-- identifier -->  
                     **</vlan-id-list>**  
                   </bridge>  
                 </family>  
               </unit>  
             </interface>  
           </logical-systems>  
         </configuration>

**Description** Trunk mode VLAN membership for this interface.

**Contents** <name>—Trunk mode VLAN membership for this interface.



## **<vlan-id-list> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <bridge-domains>  
                     <domain>  
                         **<vlan-id-list>**  
                             <name>*name*</name>   <!-- identifier -->  
                         **</vlan-id-list>**  
                     </domain>  
                 </bridge-domains>  
             </instance>  
         </routing-instances>  
     </logical-systems>  
</configuration>

**Description** Specify vlans for which auto vlan will be created.

**Contents** <name>—Specify vlans for which auto vlan will be created.

## **<vlan-id-list> (configuration/routing-instances/instance/bridge-domains/domain)**

---

**Usage** <configuration>  
     <routing-instances>  
         <instance>  
             <bridge-domains>  
                 <domain>  
                     **<vlan-id-list>**  
                         <name>*name*</name>   <!-- identifier -->  
                     **</vlan-id-list>**  
                 </domain>  
             </bridge-domains>  
         </instance>  
     </routing-instances>  
</configuration>

**Description** Specify vlans for which auto vlan will be created.

**Contents** <name>—Specify vlans for which auto vlan will be created.

## **<vlan-rewrite> (configuration/dynamic-profiles/interfaces/interface/unit/family/bridge)**

---

**Usage** <configuration>  
           <dynamic-profiles>  
             <interfaces>  
               <interface>  
                 <unit>  
                   <family>  
                     <bridge>  
                       **<vlan-rewrite>**  
                         <translate>...</translate>  
                       **</vlan-rewrite>**  
                     </bridge>  
                   </family>  
                 </unit>  
               </interface>  
             </interfaces>  
           </dynamic-profiles>  
         </configuration>

**Description** Specify vlan translation.

**Contents** <translate>—Translate incoming vlan tag.

## **<vlan-rewrite> (configuration/interfaces/interface/unit/family/bridge)**

---

**Usage** <configuration>  
           <interfaces>  
             <interface>  
               <unit>  
                 <family>  
                   <bridge>  
                     **<vlan-rewrite>**  
                       <translate>...</translate>  
                     **</vlan-rewrite>**  
                   </bridge>  
                 </family>  
               </unit>  
             </interface>  
           </interfaces>  
         </configuration>

**Description** Specify vlan translation.

**Contents** <translate>—Translate incoming vlan tag.

## **<vlan-rewrite> (configuration/logical-systems/interfaces/interface/unit/family/bridge)**

---

**Usage** <configuration>  
           <logical-systems>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           <bridge>  
             **<vlan-rewrite>**  
               <translate>...</translate>  
             **</vlan-rewrite>**  
           </bridge>  
           </family>  
           </unit>  
           </interface>  
           </interfaces>  
           </logical-systems>  
         </configuration>

**Description** Specify vlan translation.

**Contents** <translate>—Translate incoming vlan tag.

## **<vlan-tags> (configuration/bridge-domains/domain)**

---

**Usage** <configuration>  
           <bridge-domains>  
           <domain>  
             **<vlan-tags>**  
               <outer>outer</outer>   <!-- mandatory -->  
               <inner>inner</inner>  
             **</vlan-tags>**  
           </domain>  
           </bridge-domains>  
         </configuration>

**Description** IEEE 802.1q VLAN tags for bridging domain.

**Contents** <inner>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.

<outer>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.

## <vlan-tags> (configuration/dynamic-profiles/interfaces/interface/unit)

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;dynamic-profiles&gt;     &lt;interfaces&gt;       &lt;interface&gt;         &lt;unit&gt;           &lt;vlan-tags&gt;             &lt;outer&gt;outer&lt;/outer&gt;    &lt;!-- mandatory --&gt;             &lt;inner&gt;inner&lt;/inner&gt;             &lt;inner-range&gt;inner-range&lt;/inner-range&gt;           &lt;/vlan-tags&gt;         &lt;/unit&gt;       &lt;/interface&gt;     &lt;/interfaces&gt;   &lt;/dynamic-profiles&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	IEEE 802.1q tags.
<b>Contents</b>	<p>&lt;inner&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p> <p>&lt;inner-range&gt;—[tpid.]vid1-vid2, tpid format is 0xNNNN and is optional.</p> <p>&lt;outer&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p>

## <vlan-tags> (configuration/interfaces/interface/unit)

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;interfaces&gt;     &lt;interface&gt;       &lt;unit&gt;         &lt;vlan-tags&gt;           &lt;outer&gt;outer&lt;/outer&gt;    &lt;!-- mandatory --&gt;           &lt;inner&gt;inner&lt;/inner&gt;           &lt;inner-range&gt;inner-range&lt;/inner-range&gt;         &lt;/vlan-tags&gt;       &lt;/unit&gt;     &lt;/interface&gt;   &lt;/interfaces&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	IEEE 802.1q tags.
<b>Contents</b>	<p>&lt;inner&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p> <p>&lt;inner-range&gt;—[tpid.]vid1-vid2, tpid format is 0xNNNN and is optional.</p> <p>&lt;outer&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p>

## **<vlan-tags> (configuration/logical-systems/interfaces/interface/unit)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;logical-systems&gt;     &lt;interfaces&gt;       &lt;interface&gt;         &lt;unit&gt;           &lt;vlan-tags&gt;             &lt;outer&gt;outer&lt;/outer&gt;    &lt;!-- mandatory --&gt;             &lt;inner&gt;inner&lt;/inner&gt;             &lt;inner-range&gt;inner-range&lt;/inner-range&gt;           &lt;/vlan-tags&gt;         &lt;/unit&gt;       &lt;/interface&gt;     &lt;/interfaces&gt;   &lt;/logical-systems&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	IEEE 802.1q tags.
<b>Contents</b>	<p>&lt;inner&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p> <p>&lt;inner-range&gt;—[tpid.]vid1-vid2, tpid format is 0xNNNN and is optional.</p> <p>&lt;outer&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p>

## **<vlan-tags> (configuration/logical-systems/routing-instances/instance)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;logical-systems&gt;     &lt;routing-instances&gt;       &lt;instance&gt;         &lt;vlan-tags&gt;           &lt;outer&gt;outer&lt;/outer&gt;    &lt;!-- mandatory --&gt;           &lt;inner&gt;inner&lt;/inner&gt;         &lt;/vlan-tags&gt;       &lt;/instance&gt;     &lt;/routing-instances&gt;   &lt;/logical-systems&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	IEEE 802.1q VLAN tags for bridging domain.
<b>Contents</b>	<p>&lt;inner&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p> <p>&lt;outer&gt;—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.</p>

## <vlan-tags> (configuration/logical-systems/routing-instances/instance/bridge-domains/domain)

---

**Usage** <configuration>  
           <logical-systems>  
           <routing-instances>  
           <instance>  
           <bridge-domains>  
           <domain>  
             **<vlan-tags>**  
               <outer>outer</outer>   <!-- mandatory -->  
               <inner>inner</inner>  
             **</vlan-tags>**  
           </domain>  
         </bridge-domains>  
       </instance>  
     </routing-instances>  
 </logical-systems>  
</configuration>

**Description** IEEE 802.1q VLAN tags for bridging domain.

**Contents** <inner>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.  
           <outer>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.

## <vlan-tags> (configuration/routing-instances/instance)

---

**Usage** <configuration>  
           <routing-instances>  
           <instance>  
             **<vlan-tags>**  
               <outer>outer</outer>   <!-- mandatory -->  
               <inner>inner</inner>  
             **</vlan-tags>**  
           </instance>  
         </routing-instances>  
 </configuration>

**Description** IEEE 802.1q VLAN tags for bridging domain.

**Contents** <inner>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.  
           <outer>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.

## **<vlan-tags> (configuration/routing-instances/instance/bridge-domains/domain)**

---

**Usage** <configuration>  
           <routing-instances>  
           <instance>  
           <bridge-domains>  
           <domain>  
             **<vlan-tags>**  
               <outer>*outer*</outer>   <!-- mandatory -->  
               <inner>*inner*</inner>  
             **</vlan-tags>**  
           </domain>  
         </bridge-domains>  
       </instance>  
     </routing-instances>  
 </configuration>

**Description** IEEE 802.1q VLAN tags for bridging domain.

**Contents** <inner>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.  
               <outer>—[tpid.]vlan-id, tpid format is 0xNNNN and is optional.

## **<vlan-tags-outer> (configuration/dynamic-profiles/interfaces/interface-set/interface)**

---

**Usage** <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface-set>  
           <interface>  
             **<vlan-tags-outer>**  
               <name>*name*</name>   <!-- identifier -->  
             **</vlan-tags-outer>**  
           </interface>  
         </interface-set>  
       </interfaces>  
     </dynamic-profiles>  
 </configuration>

**Description** One or more outer VLAN tags.

**Contents** <name>—VLAN tag ID.

## **<vlan-tags-outer> (configuration/interfaces/interface-set/interface)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;interfaces&gt;     &lt;interface-set&gt;       &lt;interface&gt;         &lt;vlan-tags-outer&gt;           &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;         &lt;/vlan-tags-outer&gt;       &lt;/interface&gt;     &lt;/interface-set&gt;   &lt;/interfaces&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	One or more outer VLAN tags.
<b>Contents</b>	<name>—VLAN tag ID.

## **<voice> (configuration/services/cos/application-profile/sip)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;services&gt;     &lt;cos&gt;       &lt;application-profile&gt;         &lt;sip&gt;           &lt;voice&gt;             &lt;dscp&gt;dscp&lt;/dscp&gt;             &lt;forwarding-class&gt;forwarding-class&lt;/forwarding-class&gt;           &lt;/voice&gt;         &lt;/sip&gt;       &lt;/application-profile&gt;     &lt;/cos&gt;   &lt;/services&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	CoS treatment of SIP voice data.
<b>Contents</b>	<p>&lt;dscp&gt;—Code point alias or bit string.</p> <p>&lt;forwarding-class&gt;—Forwarding class assigned to outgoing packets.</p>



## **<volume> (configuration/services/ggsn/apn/service-based-charging/block-based-charging/profile/default-roaming-class)**

---

**Usage**   <configuration>  
               <services>  
                   <ggsn>  
                     <apn>  
                       <service-based-charging>  
                       <block-based-charging>  
                       <profile>  
                         <default-roaming-class>  
                           **<volume>**  
                             <uplink-resolution>bytes</uplink-resolution>  
                             <downlink-resolution>bytes</downlink-resolution>  
                             <total-resolution>bytes</total-resolution>  
                           **</volume>**  
                         </default-roaming-class>  
                       </profile>  
                     </block-based-charging>  
                   </service-based-charging>  
                 </apn>  
               </ggsn>  
             </services>  
           </configuration>

**Description**   Volume block settings.

**Contents**   <downlink-resolution>—Volume measurement resolution for downlink payload.

              <total-resolution>—Volume measurement resolution for total payload.

              <uplink-resolution>—Volume measurement resolution for uplink payload.

## **<volume> (configuration/services/ggsn/apn/service-based-charging/block-based-charging/profile/default-roaming-class/default-service-class-group)**

---

**Usage**

```

<configuration>
  <services>
    <ggsn>
      <apn>
        <service-based-charging>
          <block-based-charging>
            <profile>
              <default-roaming-class>
                <default-service-class-group>
                  <volume>
                    <uplink-resolution>bytes</uplink-resolution>
                    <downlink-resolution>bytes</downlink-resolution>
                    <total-resolution>bytes</total-resolution>
                  </volume>
                </default-service-class-group>
              </default-roaming-class>
            </profile>
          </block-based-charging>
        </service-based-charging>
      </apn>
    </ggsn>
  </services>
</configuration>

```

**Description** Volume block settings.

**Contents**

- <downlink-resolution>—Volume measurement resolution for downlink payload.
- <total-resolution>—Volume measurement resolution for total payload.
- <uplink-resolution>—Volume measurement resolution for uplink payload.

**<volume> (configuration/services/ggsn/apn/  
service-based-charging/block-based-charging/profile/  
default-roaming-class/service-class-group)**

---

**Usage**   <configuration>  
          <services>  
          <ggsn>  
          <apn>  
          <service-based-charging>  
          <block-based-charging>  
          <profile>  
          <default-roaming-class>  
          <service-class-group>  
          **<volume>**  
          <uplink-resolution>bytes</uplink-resolution>  
          <downlink-resolution>bytes</downlink-resolution>  
          <total-resolution>bytes</total-resolution>  
          **</volume>**  
          </service-class-group>  
          </default-roaming-class>  
          </profile>  
          </block-based-charging>  
          </service-based-charging>  
          </apn>  
          </ggsn>  
          </services>  
          </configuration>

**Description**   Volume block settings.

**Contents**   <downlink-resolution>—Volume measurement resolution for downlink payload.  
  
              <total-resolution>—Volume measurement resolution for total payload.  
  
              <uplink-resolution>—Volume measurement resolution for uplink payload.

## **<volume> (configuration/services/ggsn/apn/service-based-charging/block-based-charging/profile/roaming-class)**

---

**Usage**

```

<configuration>
  <services>
    <ggsn>
      <apn>
        <service-based-charging>
          <block-based-charging>
            <profile>
              <roaming-class>
                <volume>
                  <uplink-resolution>bytes</uplink-resolution>
                  <downlink-resolution>bytes</downlink-resolution>
                  <total-resolution>bytes</total-resolution>
                </volume>
              </roaming-class>
            </profile>
          </block-based-charging>
        </service-based-charging>
      </apn>
    </ggsn>
  </services>
</configuration>

```

**Description** Volume block settings.

**Contents** <downlink-resolution>—Volume measurement resolution for downlink payload.

<total-resolution>—Volume measurement resolution for total payload.

<uplink-resolution>—Volume measurement resolution for uplink payload.

**<volume> (configuration/services/ggsn/apn/  
service-based-charging/block-based-charging/profile/  
roaming-class/default-service-class-group)**

---

**Usage**   <configuration>  
          <services>  
          <ggsn>  
          <apn>  
          <service-based-charging>  
          <block-based-charging>  
          <profile>  
          <roaming-class>  
          <default-service-class-group>  
          **<volume>**  
            <uplink-resolution>bytes</uplink-resolution>  
            <downlink-resolution>bytes</downlink-resolution>  
            <total-resolution>bytes</total-resolution>  
          **</volume>**  
          </default-service-class-group>  
          </roaming-class>  
          </profile>  
          </block-based-charging>  
          </service-based-charging>  
          </apn>  
          </ggsn>  
          </services>  
          </configuration>

**Description**   Volume block settings.

**Contents**   <downlink-resolution>—Volume measurement resolution for downlink payload.  
  
              <total-resolution>—Volume measurement resolution for total payload.  
  
              <uplink-resolution>—Volume measurement resolution for uplink payload.

## **<volume> (configuration/services/ggsn/apn/service-based-charging/block-based-charging/profile/roaming-class/service-class-group)**

---

**Usage**

```

<configuration>
  <services>
    <ggsn>
      <apn>
        <service-based-charging>
          <block-based-charging>
            <profile>
              <roaming-class>
                <service-class-group>
                  <volume>
                    <uplink-resolution>bytes</uplink-resolution>
                    <downlink-resolution>bytes</downlink-resolution>
                    <total-resolution>bytes</total-resolution>
                  </volume>
                </service-class-group>
              </roaming-class>
            </profile>
          </block-based-charging>
        </service-based-charging>
      </apn>
    </ggsn>
  </services>
</configuration>

```

**Description** Volume block settings.

**Contents**

- <downlink-resolution>—Volume measurement resolution for downlink payload.
- <total-resolution>—Volume measurement resolution for total payload.
- <uplink-resolution>—Volume measurement resolution for uplink payload.

## <vpi> (configuration/dynamic-profiles/interfaces/interface/atm-options)

---

**Usage**   <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface>  
           <atm-options>  
           **<vpi>**  
             <name>*name*</name>   <!-- identifier -->  
             <maximum-vcs>*maximum-vcs*</maximum-vcs>  
             <shaping>...</shaping>  
             <oam-period>...</oam-period>  
             <oam-liveness>...</oam-liveness>  
           **</vpi>**  
           </atm-options>  
           </interface>  
           </interfaces>  
           </dynamic-profiles>  
         </configuration>

**Description**   Define a virtual path.

**Contents**   <maximum-vcs>—Maximum number of virtual circuits on this VP.

          <name>—Virtual path index.

          <oam-liveness>—F4 OAM virtual path liveness parameters.

          <oam-period>—F4 OAM cell period.

          <shaping>—Virtual path traffic-shaping options.

## **<vpi> (configuration/dynamic-profiles/interfaces/interface/atm-options/promiscuous-mode)**

---

**Usage** <configuration>  
     <dynamic-profiles>  
         <interfaces>  
             <interface>  
                 <atm-options>  
                     <promiscuous-mode>  
                         **<vpi>**  
                             <name>*name*</name>   <!-- identifier -->  
                         **</vpi>**  
                     </promiscuous-mode>  
                 </atm-options>  
             </interface>  
         </interfaces>  
     </dynamic-profiles>  
 </configuration>

**Description** Open this VPI in promiscuous mode.

**Contents** <name>—Virtual path index.

## **<vpi> (configuration/interfaces/interface/atm-options)**

---

**Usage** <configuration>  
     <interfaces>  
         <interface>  
             <atm-options>  
                 **<vpi>**  
                     <name>*name*</name>   <!-- identifier -->  
                     <maximum-vcs>*maximum-vcs*</maximum-vcs>  
                     <shaping>...</shaping>  
                     <oam-period>...</oam-period>  
                     <oam-liveness>...</oam-liveness>  
                 **</vpi>**  
             </atm-options>  
         </interface>  
     </interfaces>  
 </configuration>

**Description** Define a virtual path.

**Contents** <maximum-vcs>—Maximum number of virtual circuits on this VP.

<name>—Virtual path index.

<oam-liveness>—F4 OAM virtual path liveness parameters.

<oam-period>—F4 OAM cell period.

<shaping>—Virtual path traffic-shaping options.



## **<vpi> (configuration/interfaces/interface/atm-options/promiscuous-mode)**

---

**Usage**   <configuration>  
           <interfaces>  
           <interface>  
           <atm-options>  
           <promiscuous-mode>  
           **<vpi>**  
           <name>name</name>   <!-- identifier -->  
           **</vpi>**  
           </promiscuous-mode>  
           </atm-options>  
           </interface>  
           </interfaces>  
           </configuration>

**Description**   Open this VPI in promiscuous mode.

**Contents**    <name>—Virtual path index.

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

---

**Usage**   <configuration>  
           <dynamic-profiles>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           **<vpis>**  
           <core-facing/>  
           <filter>...</filter>  
           <policer>...</policer>  
           **</vpis>**  
           </family>  
           </unit>  
           </interface>  
           </interfaces>  
           </dynamic-profiles>  
           </configuration>

**Description**   Virtual private LAN service parameters.

**Contents**    <core-facing>—Interface is core facing.

              <filter>—Packet filtering.

              <policer>—Interface policing.

**<vpls> (configuration/firewall/family)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;firewall&gt;     &lt;family&gt;       &lt;vpls&gt;         &lt;filter&gt;...&lt;/filter&gt;       &lt;/vpls&gt;     &lt;/family&gt;   &lt;/firewall&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Protocol family VPLS for firewall filter.
<b>Contents</b>	<filter>—No documentation is available yet.

**<vpls> (configuration/forwarding-options/family)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;forwarding-options&gt;     &lt;family&gt;       &lt;vpls&gt;         &lt;filter&gt;...&lt;/filter&gt;         &lt;flood&gt;...&lt;/flood&gt;       &lt;/vpls&gt;     &lt;/family&gt;   &lt;/forwarding-options&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VPLS parameters.
<b>Contents</b>	<filter>—Filtering for VPLS DMAC forwarding table.  <flood>—Filtering for VPLS flood table.

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

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;forwarding-options&gt;     &lt;port-mirroring&gt;       &lt;family&gt;         &lt;vpls&gt;           &lt;output&gt;...&lt;/output&gt;         &lt;/vpls&gt;       &lt;/family&gt;     &lt;/port-mirroring&gt;   &lt;/forwarding-options&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Mirror Layer-2 bridged/vpls packets.
<b>Contents</b>	<output>—Destination for port-mirrored packets.

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

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;forwarding-options&gt;     &lt;port-mirroring&gt;       &lt;instance&gt;         &lt;family&gt;           &lt;b&gt;vpls&lt;/b&gt;             &lt;output&gt;...&lt;/output&gt;           &lt;b&gt;vpls&lt;/b&gt;         &lt;/family&gt;       &lt;/instance&gt;     &lt;/port-mirroring&gt;   &lt;/forwarding-options&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Mirror Layer-2 bridged/vpls packets.
<b>Contents</b>	<output>—Destination for port-mirrored packets.

## **<vpls> (configuration/interfaces/interface/unit/family)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;interfaces&gt;     &lt;interface&gt;       &lt;unit&gt;         &lt;family&gt;           &lt;b&gt;vpls&lt;/b&gt;             &lt;core-facing/&gt;             &lt;filter&gt;...&lt;/filter&gt;             &lt;policer&gt;...&lt;/policer&gt;           &lt;b&gt;vpls&lt;/b&gt;         &lt;/family&gt;       &lt;/unit&gt;     &lt;/interface&gt;   &lt;/interfaces&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Virtual private LAN service parameters.
<b>Contents</b>	<p>&lt;core-facing&gt;—Interface is core facing.</p> <p>&lt;filter&gt;—Packet filtering.</p> <p>&lt;policer&gt;—Interface policing.</p>

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

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;logical-systems&gt;     &lt;firewall&gt;       &lt;family&gt;         &lt;vppls&gt;           &lt;filter&gt;...&lt;/filter&gt;         &lt;/vppls&gt;       &lt;/family&gt;     &lt;/firewall&gt;   &lt;/logical-systems&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Protocol family VPLS for firewall filter.
<b>Contents</b>	<filter>—No documentation is available yet.

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

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;logical-systems&gt;     &lt;interfaces&gt;       &lt;interface&gt;         &lt;unit&gt;           &lt;family&gt;             &lt;vppls&gt;               &lt;core-facing/&gt;               &lt;filter&gt;...&lt;/filter&gt;               &lt;policer&gt;...&lt;/policer&gt;             &lt;/vppls&gt;           &lt;/family&gt;         &lt;/unit&gt;       &lt;/interface&gt;     &lt;/interfaces&gt;   &lt;/logical-systems&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Virtual private LAN service parameters.
<b>Contents</b>	<p>&lt;core-facing&gt;—Interface is core facing.</p> <p>&lt;filter&gt;—Packet filtering.</p> <p>&lt;policer&gt;—Interface policing.</p>

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

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;logical-systems&gt;     &lt;routing-instances&gt;       &lt;instance&gt;         &lt;forwarding-options&gt;           &lt;family&gt;             &lt;b&gt;vpls&lt;/b&gt;               &lt;filter&gt;...&lt;/filter&gt;               &lt;flood&gt;...&lt;/flood&gt;             &lt;b&gt;/vpls&lt;/b&gt;           &lt;/family&gt;         &lt;/forwarding-options&gt;       &lt;/instance&gt;     &lt;/routing-instances&gt;   &lt;/logical-systems&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VPLS parameters.
<b>Contents</b>	<p>&lt;filter&gt;—Filtering for VPLS DMAC forwarding table.</p> <p>&lt;flood&gt;—Filtering for VPLS flood table.</p>

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

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;logical-systems&gt;     &lt;routing-instances&gt;       &lt;instance&gt;         &lt;forwarding-options&gt;           &lt;port-mirroring&gt;             &lt;family&gt;               &lt;b&gt;vpls&lt;/b&gt;                 &lt;output&gt;...&lt;/output&gt;               &lt;b&gt;/vpls&lt;/b&gt;             &lt;/family&gt;           &lt;/port-mirroring&gt;         &lt;/forwarding-options&gt;       &lt;/instance&gt;     &lt;/routing-instances&gt;   &lt;/logical-systems&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	Mirror Layer-2 bridged/vpls packets.
<b>Contents</b>	<output>—Destination for port-mirrored packets.

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

---

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

**Description**   Mirror Layer-2 bridged/vpls packets.

**Contents**   <output>—Destination for port-mirrored packets.

## <vpls> (configuration/logical-systems/routing-instances/instance/protocols)

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <protocols>  
                     **<vpls>**  
                         <traceoptions>...</traceoptions>  
                         <encapsulation-type>encapsulation-type-choice</encapsulation-type>  
                         <control-word/>  
                         <site-range>site-range</site-range>  
                         <mac-table-size>...</mac-table-size>  
                         <interface-mac-limit>...</interface-mac-limit>  
                         <mac-table-aging-time>seconds</mac-table-aging-time>  
                         <no-mac-learning/>  
                         <mac-statistics/>  
                         <interface>...</interface>  
                         <tunnel-services>...</tunnel-services>  
                         <no-tunnel-services/>  
                         <site>...</site>  
                         <community>community</community>  
                         <vpls-id>vpls-id</vpls-id>  
                         <mtu>mtu</mtu>  
                         <ignore-mtu-mismatch/>  
                         <mac-tlv-receive/>  
                         <mac-tlv-send/>  
                         <ignore-encapsulation-mismatch/>  
                         <neighbor>...</neighbor>  
                         <associate-profile>associate-profile</associate-profile>  
                         <mesh-group>...</mesh-group>  
                         <connectivity-type>connectivity-type-choice</connectivity-type>  
                     **</vpls>**  
                 </protocols>  
             </instance>  
         </routing-instances>  
     </logical-systems>  
</configuration>

**Description** VPLS configuration.

**Contents** <associate-profile>—Associate profile name for dynamic IFL.

<community>—Community associated with this VPLS instance.

<connectivity-type>—Specify type of interface sufficient to bring vpls connection up.

■ ce—CE interface is required.

■ irb—IRB interface is sufficient.

<control-word>—Add control word to the Layer 2 encapsulation.

`<encapsulation-type>`—Encapsulation type for VPN.

- `atm-aal5`—ATM AAL/5 encapsulation.
- `atm-cell`—ATM port promiscuous mode cell encapsulation.
- `atm-cell-port-mode`—ATM port promiscuous mode cell encapsulation.
- `atm-cell-vc-mode`—ATM non-promiscuous cell encapsulation.
- `atm-cell-vp-mode`—ATM VP promiscuous mode cell encapsulation.
- `cesop`—CESOP based Layer 2 VPN.
- `cisco-hdlc`—Cisco-compatible HDLC encapsulation.
- `ethernet`—Ethernet encapsulation.
- `ethernet-vlan`—Ethernet VLAN encapsulation.
- `frame-relay`—Frame Relay encapsulation.
- `frame-relay-port-mode`—Frame Relay port mode encapsulation.
- `interworking`—Layer 2.5 interworking VPN.
- `ppp`—PPP encapsulation.
- `satop-e1`—SATOP-E1 based Layer 2 VPN.
- `satop-e3`—SATOP-E3 based Layer 2 VPN.
- `satop-t1`—SATOP-T1 based Layer 2 VPN.
- `satop-t3`—SATOP-T3 based Layer 2 VPN.

`<ignore-encapsulation-mismatch>`—Allow different encapsulation types on local and remote end.

`<ignore-mtu-mismatch>`—Allow different MTU values on local and remote end.

`<interface>`—Interface that connect this site to the VPN.

`<interface-mac-limit>`—Maximum MAC address learned per interface.

`<mac-statistics>`—Enable MAC address statistics.

`<mac-table-aging-time>`—Delay for discarding MAC address if no updates are received.

`<mac-table-size>`—Size of MAC address forwarding table.

`<mac-tlv-receive>`—Turn on mac-tlv receive processing.

`<mac-tlv-send>`—Turn on mac-tlv send processing.



- <mesh-group>—Mesh-group under this VPLS instance.
- <mtu>—MTU to be advertised for these Layer 2 circuits.
- <neighbor>—Neighbor for this VPLS instance.
- <no-mac-learning>—Disable dynamic MAC address learning.
- <no-tunnel-services>—Do not use tunnel services for this VPLS instance.
- <site>—Sites connected to this provider equipment.
- <site-range>—Maximum site identifier in this VPLS domain.
- <traceoptions>—Trace options for Layer 2 VPN and VPLS.
- <tunnel-services>—Use tunnel services for this VPLS instance.
- <vpls-id>—Identifier for this VPLS instance.

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

---

Usage	<pre>&lt;configuration&gt;   &lt;routing-instances&gt;     &lt;instance&gt;       &lt;forwarding-options&gt;         &lt;family&gt;           &lt;vpls&gt;             &lt;filter&gt;...&lt;/filter&gt;             &lt;flood&gt;...&lt;/flood&gt;           &lt;/vpls&gt;         &lt;/family&gt;       &lt;/forwarding-options&gt;     &lt;/instance&gt;   &lt;/routing-instances&gt; &lt;/configuration&gt;</pre>
Description	VPLS parameters.
Contents	<p>&lt;filter&gt;—Filtering for VPLS DMAC forwarding table.</p> <p>&lt;flood&gt;—Filtering for VPLS flood table.</p>

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

---

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

**Description** Mirror Layer-2 bridged/vpls packets.

**Contents** <output>—Destination for port-mirrored packets.

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

---

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

**Description** Mirror Layer-2 bridged/vpls packets.

**Contents** <output>—Destination for port-mirrored packets.

**<vpls> (configuration/routing-instances/instance/protocols)**

**Usage** <configuration>  
 <routing-instances>  
 <instance>  
 <protocols>  
**<vpls>**  
 <traceoptions>...</traceoptions>  
 <encapsulation-type>encapsulation-type-choice</encapsulation-type>  
 <control-word/>  
 <site-range>site-range</site-range>  
 <mac-table-size>...</mac-table-size>  
 <interface-mac-limit>...</interface-mac-limit>  
 <mac-table-aging-time>seconds</mac-table-aging-time>  
 <no-mac-learning/>  
 <mac-statistics/>  
 <interface>...</interface>  
 <tunnel-services>...</tunnel-services>  
 <no-tunnel-services/>  
 <site>...</site>  
 <community>community</community>  
 <vpls-id>vpls-id</vpls-id>  
 <mtu>mtu</mtu>  
 <ignore-mtu-mismatch/>  
 <mac-tlv-receive/>  
 <mac-tlv-send/>  
 <ignore-encapsulation-mismatch/>  
 <neighbor>...</neighbor>  
 <associate-profile>associate-profile</associate-profile>  
 <mesh-group>...</mesh-group>  
 <connectivity-type>connectivity-type-choice</connectivity-type>  
**</vpls>**  
 </protocols>  
 </instance>  
 </routing-instances>  
 </configuration>

**Description** VPLS configuration.

**Contents** <associate-profile>—Associate profile name for dynamic IFL.

<community>—Community associated with this VPLS instance.

<connectivity-type>—Specify type of interface sufficient to bring vpls connection up.

■ ce—CE interface is required.

■ irb—IRB interface is sufficient.

<control-word>—Add control word to the Layer 2 encapsulation.

<encapsulation-type>—Encapsulation type for VPN.

■ atm-aal5—ATM AAL/5 encapsulation.

- `atm-cell`—ATM port promiscuous mode cell encapsulation.
- `atm-cell-port-mode`—ATM port promiscuous mode cell encapsulation.
- `atm-cell-vc-mode`—ATM non-promiscuous cell encapsulation.
- `atm-cell-vp-mode`—ATM VP promiscuous mode cell encapsulation.
- `cesop`—CESOP based Layer 2 VPN.
- `cisco-hdlc`—Cisco-compatible HDLC encapsulation.
- `ethernet`—Ethernet encapsulation.
- `ethernet-vlan`—Ethernet VLAN encapsulation.
- `frame-relay`—Frame Relay encapsulation.
- `frame-relay-port-mode`—Frame Relay port mode encapsulation.
- `interworking`—Layer 2.5 interworking VPN.
- `ppp`—PPP encapsulation.
- `satop-e1`—SATOP-E1 based Layer 2 VPN.
- `satop-e3`—SATOP-E3 based Layer 2 VPN.
- `satop-t1`—SATOP-T1 based Layer 2 VPN.
- `satop-t3`—SATOP-T3 based Layer 2 VPN.

`<ignore-encapsulation-mismatch>`—Allow different encapsulation types on local and remote end.

`<ignore-mtu-mismatch>`—Allow different MTU values on local and remote end.

`<interface>`—Interface that connect this site to the VPN.

`<interface-mac-limit>`—Maximum MAC address learned per interface.

`<mac-statistics>`—Enable MAC address statistics.

`<mac-table-aging-time>`—Delay for discarding MAC address if no updates are received.

`<mac-table-size>`—Size of MAC address forwarding table.

`<mac-tlv-receive>`—Turn on mac-tlv receive processing.

`<mac-tlv-send>`—Turn on mac-tlv send processing.

`<mesh-group>`—Mesh-group under this VPLS instance.

`<mtu>`—MTU to be advertised for these Layer 2 circuits.

<neighbor>—Neighbor for this VPLS instance.

<no-mac-learning>—Disable dynamic MAC address learning.

<no-tunnel-services>—Do not use tunnel services for this VPLS instance.

<site>—Sites connected to this provider equipment.

<site-range>—Maximum site identifier in this VPLS domain.

<traceoptions>—Trace options for Layer 2 VPN and VPLS.

<tunnel-services>—Use tunnel services for this VPLS instance.

<vpls-id>—Identifier for this VPLS instance.

### **<vpn-unequal-cost> (configuration/logical-systems/ routing-instances/instance/routing-options/multipath)**

---

**Usage**   <configuration>  
          <logical-systems>  
          <routing-instances>  
          <instance>  
          <routing-options>  
          <multipath>  
          **<vpn-unequal-cost>**  
          <equal-external-internal/>  
          **</vpn-unequal-cost>**  
          </multipath>  
          </routing-options>  
          </instance>  
          </routing-instances>  
          </logical-systems>  
          </configuration>

**Description**   Include VPN routes with unequal IGP metrics.

**Contents**   <equal-external-internal>—Include external and internal VPN routes.

## **<vpn-unequal-cost> (configuration/logical-systems/routing-instances/instance/routing-options/rib/multipath)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-instances>  
             <instance>  
                 <routing-options>  
                     <rib>  
                         <multipath>  
                             **<vpn-unequal-cost>**  
                                 <equal-external-internal/>  
                             **</vpn-unequal-cost>**  
                         </multipath>  
                     </rib>  
                 </routing-options>  
             </instance>  
         </routing-instances>  
     </logical-systems>  
 </configuration>

**Description** Include VPN routes with unequal IGP metrics.

**Contents** <equal-external-internal>—Include external and internal VPN routes.

## **<vpn-unequal-cost> (configuration/logical-systems/routing-options/multipath)**

---

**Usage** <configuration>  
     <logical-systems>  
         <routing-options>  
             <multipath>  
                 **<vpn-unequal-cost>**  
                     <equal-external-internal/>  
                 **</vpn-unequal-cost>**  
             </multipath>  
         </routing-options>  
     </logical-systems>  
 </configuration>

**Description** Include VPN routes with unequal IGP metrics.

**Contents** <equal-external-internal>—Include external and internal VPN routes.

## **<vpn-unequal-cost> (configuration/logical-systems/ routing-options/rib/multipath)**

---

**Usage**   <configuration>  
          <logical-systems>  
          <routing-options>  
          <rib>  
          <multipath>  
          **<vpn-unequal-cost>**  
          <equal-external-internal/>  
          **</vpn-unequal-cost>**  
          </multipath>  
          </rib>  
          </routing-options>  
          </logical-systems>  
          </configuration>

**Description**   Include VPN routes with unequal IGP metrics.

**Contents**   <equal-external-internal>—Include external and internal VPN routes.

## **<vpn-unequal-cost> (configuration/routing-instances/instance/ routing-options/multipath)**

---

**Usage**   <configuration>  
          <routing-instances>  
          <instance>  
          <routing-options>  
          <multipath>  
          **<vpn-unequal-cost>**  
          <equal-external-internal/>  
          **</vpn-unequal-cost>**  
          </multipath>  
          </routing-options>  
          </instance>  
          </routing-instances>  
          </configuration>

**Description**   Include VPN routes with unequal IGP metrics.

**Contents**   <equal-external-internal>—Include external and internal VPN routes.

## **<vpn-unequal-cost> (configuration/routing-instances/instance/routing-options/rib/multipath)**

---

**Usage** <configuration>  
           <routing-instances>  
             <instance>  
               <routing-options>  
                 <rib>  
                   <multipath>  
                     **<vpn-unequal-cost>**  
                       <equal-external-internal/>  
                     **</vpn-unequal-cost>**  
                   </multipath>  
                 </rib>  
               </routing-options>  
             </instance>  
           </routing-instances>  
         </configuration>

**Description** Include VPN routes with unequal IGP metrics.

**Contents** <equal-external-internal>—Include external and internal VPN routes.

## **<vpn-unequal-cost> (configuration/routing-options/multipath)**

---

**Usage** <configuration>  
           <routing-options>  
             <multipath>  
               **<vpn-unequal-cost>**  
                 <equal-external-internal/>  
               **</vpn-unequal-cost>**  
             </multipath>  
           </routing-options>  
         </configuration>

**Description** Include VPN routes with unequal IGP metrics.

**Contents** <equal-external-internal>—Include external and internal VPN routes.



**<vpn-unequal-cost> (configuration/routing-options/rib/multipath)**

---

**Usage** <configuration>  
           <routing-options>  
           <rib>  
           <multipath>  
             **<vpn-unequal-cost>**  
               <equal-external-internal/>  
             **</vpn-unequal-cost>**  
           </multipath>  
         </rib>  
       </routing-options>  
     </configuration>

**Description** Include VPN routes with unequal IGP metrics.

**Contents** <equal-external-internal>—Include external and internal VPN routes.

**<vrf-export> (configuration/logical-systems/routing-instances/instance)**

---

**Usage** <configuration>  
           <logical-systems>  
           <routing-instances>  
           <instance>  
             **<vrf-export>**  
               <name>name</name>   <!-- identifier -->  
             **</vrf-export>**  
           </instance>  
         </routing-instances>  
       </logical-systems>  
     </configuration>

**Description** Export policy for VRF instance RIBs.

**Contents** <name>—Export policy for VRF instance RIBs.

**<vrf-export> (configuration/routing-instances/instance)**

---

**Usage** <configuration>  
           <routing-instances>  
           <instance>  
             **<vrf-export>**  
               <name>name</name>   <!-- identifier -->  
             **</vrf-export>**  
           </instance>  
         </routing-instances>  
     </configuration>

**Description** Export policy for VRF instance RIBs.

**Contents** <name>—Export policy for VRF instance RIBs.

## **<vrf-import> (configuration/logical-systems/routing-instances/instance)**

---

**Usage** <configuration>  
           <logical-systems>  
             <routing-instances>  
               <instance>  
                 **<vrf-import>**  
                   <name>*name*</name>   <!-- identifier -->  
                 **</vrf-import>**  
               </instance>  
             </routing-instances>  
           </logical-systems>  
         </configuration>

**Description** Import policy for VRF instance RIBs.

**Contents** <name>—Import policy for VRF instance RIBs.

## **<vrf-import> (configuration/routing-instances/instance)**

---

**Usage** <configuration>  
           <routing-instances>  
             <instance>  
               **<vrf-import>**  
                 <name>*name*</name>   <!-- identifier -->  
               **</vrf-import>**  
             </instance>  
           </routing-instances>  
         </configuration>

**Description** Import policy for VRF instance RIBs.

**Contents** <name>—Import policy for VRF instance RIBs.

## **<vrf-table-label> (configuration/logical-systems/ routing-instances/instance)**

---

- Usage**   <configuration>  
          <logical-systems>  
          <routing-instances>  
          <instance>  
          **<vrf-table-label>**  
          <source-class-usage/>  
          **</vrf-table-label>**  
          </instance>  
          </routing-instances>  
          </logical-systems>  
          </configuration>
- Description**   Advertise a single VPN label for all routes in the VRF.
- Contents**    <source-class-usage>—Enable source class usage.

## **<vrf-table-label> (configuration/routing-instances/instance)**

---

- Usage**   <configuration>  
          <routing-instances>  
          <instance>  
          **<vrf-table-label>**  
          <source-class-usage/>  
          **</vrf-table-label>**  
          </instance>  
          </routing-instances>  
          </configuration>
- Description**   Advertise a single VPN label for all routes in the VRF.
- Contents**    <source-class-usage>—Enable source class usage.

## **<vrf-target> (configuration/logical-systems/routing-instances/instance)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;logical-systems&gt;     &lt;routing-instances&gt;       &lt;instance&gt;         &lt;vrf-target&gt;           &lt;community&gt;community&lt;/community&gt;           &lt;import&gt;import&lt;/import&gt;           &lt;export&gt;export&lt;/export&gt;         &lt;/vrf-target&gt;       &lt;/instance&gt;     &lt;/routing-instances&gt;   &lt;/logical-systems&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VRF target community configuration.
<b>Contents</b>	<p>&lt;community&gt;—Target community to use in import and export.</p> <p>&lt;export&gt;—Target community to use when marking routes on export.</p> <p>&lt;import&gt;—Target community to use when filtering on import.</p>

## **<vrf-target> (configuration/routing-instances/instance)**

---

<b>Usage</b>	<pre> &lt;configuration&gt;   &lt;routing-instances&gt;     &lt;instance&gt;       &lt;vrf-target&gt;         &lt;community&gt;community&lt;/community&gt;         &lt;import&gt;import&lt;/import&gt;         &lt;export&gt;export&lt;/export&gt;       &lt;/vrf-target&gt;     &lt;/instance&gt;   &lt;/routing-instances&gt; &lt;/configuration&gt; </pre>
<b>Description</b>	VRF target community configuration.
<b>Contents</b>	<p>&lt;community&gt;—Target community to use in import and export.</p> <p>&lt;export&gt;—Target community to use when marking routes on export.</p> <p>&lt;import&gt;—Target community to use when filtering on import.</p>

**<vrrp> (configuration/logical-systems/protocols)**

---

- Usage** `<configuration>  
     <logical-systems>  
         <protocols>  
             <vrrp>  
                 <traceoptions>...</traceoptions>  
                 <failover-delay>milliseconds</failover-delay>  
                 <startup-silent-period>seconds</startup-silent-period>  
             </vrrp>  
         </protocols>  
     </logical-systems>  
</configuration>`
- Description** VRRP options.
- Contents** `<failover-delay>`—Additional failover delay timer.  
`<startup-silent-period>`—Period for ignoring master down timer at device startup.  
`<traceoptions>`—Trace options for VRRP.

**<vrrp> (configuration/protocols)**

---

- Usage** `<configuration>  
     <protocols>  
         <vrrp>  
             <traceoptions>...</traceoptions>  
             <failover-delay>milliseconds</failover-delay>  
             <startup-silent-period>seconds</startup-silent-period>  
         </vrrp>  
     </protocols>  
</configuration>`
- Description** VRRP options.
- Contents** `<failover-delay>`—Additional failover delay timer.  
`<startup-silent-period>`—Period for ignoring master down timer at device startup.  
`<traceoptions>`—Trace options for VRRP.

## <vrrp-group> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet/address)

---

**Usage**

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>
              <address>
                <vrrp-group>
                  <name>name</name>    <!-- identifier -->
                  <virtual-address>...</virtual-address>
                  <virtual-inet6-address>...</virtual-inet6-address>
                  <virtual-link-local-address>virtual-link-local-address
                  </virtual-link-local-address>
                  <priority>priority</priority>
                  <advertise-interval>seconds</advertise-interval>
                  <fast-interval>milliseconds</fast-interval>
                  <inet6-advertise-interval>milliseconds</inet6-advertise-interval>
                  <preempt>...</preempt>
                  <no-preempt/>
                  <accept-data/>
                  <no-accept-data/>
                  <authentication-type>authentication-type-choice
                      </authentication-type>
                  <authentication-key>authentication-key</authentication-key>
                  <track>...</track>
                </vrrp-group>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

**Description** VRRP group.

**Contents** <accept-data>—Accept packets destined for virtual IP address.

<advertise-interval>—Advertisement interval.

<authentication-key>—Authentication key.

<authentication-type>—Authentication type.

- md5—HMAC-MD5-96.

- simple—Simple password.

<fast-interval>—Fast advertisement interval.

<inet6-advertise-interval>—Inet6 advertisement interval.

<name>—Identifier for VRRP group.

<no-accept-data>—Don't accept packets destined for virtual IP address.

<no-preempt>—Don't allow preemption.

<preempt>—Allow preemption.

<priority>—Virtual router election priority.

<track>—Interfaces to track for VRRP group.

<virtual-address>—One or more virtual IPv4 addresses.

<virtual-inet6-address>—One or more virtual inet6 addresses.

<virtual-link-local-address>—Virtual link-local addresses.

## <vrrp-group> (configuration/interfaces/interface/unit/family/inet/address)

---

**Usage**

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <inet>
            <address>
              <vrrp-group>
                <name>name</name>    <!-- identifier -->
                <virtual-address>...</virtual-address>
                <virtual-inet6-address>...</virtual-inet6-address>
                <virtual-link-local-address>virtual-link-local-address
                  </virtual-link-local-address>
                <priority>priority</priority>
                <advertise-interval>seconds</advertise-interval>
                <fast-interval>milliseconds</fast-interval>
                <inet6-advertise-interval>milliseconds</inet6-advertise-interval>
                <preempt>...</preempt>
                <no-preempt/>
                <accept-data/>
                <no-accept-data/>
                <authentication-type>authentication-type-choice
                  </authentication-type>
                <authentication-key>authentication-key</authentication-key>
                <track>...</track>
              </vrrp-group>
            </address>
          </inet>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>

```

**Description** VRRP group.

**Contents** <accept-data>—Accept packets destined for virtual IP address.

<advertise-interval>—Advertisement interval.

<authentication-key>—Authentication key.

<authentication-type>—Authentication type.

■ md5—HMAC-MD5-96.

■ simple—Simple password.

<fast-interval>—Fast advertisement interval.

<inet6-advertise-interval>—Inet6 advertisement interval.



<name>—Identifier for VRRP group.

<no-accept-data>—Don't accept packets destined for virtual IP address.

<no-preempt>—Don't allow preemption.

<preempt>—Allow preemption.

<priority>—Virtual router election priority.

<track>—Interfaces to track for VRRP group.

<virtual-address>—One or more virtual IPv4 addresses.

<virtual-inet6-address>—One or more virtual inet6 addresses.

<virtual-link-local-address>—Virtual link-local addresses.

## <vrrp-group> (configuration/logical-systems/interfaces/interface/unit/family/inet/address)

---

**Usage**

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet>
              <address>
                <vrrp-group>
                  <name>name</name>    <!-- identifier -->
                  <virtual-address>...</virtual-address>
                  <virtual-inet6-address>...</virtual-inet6-address>
                  <virtual-link-local-address>virtual-link-local-address
                  </virtual-link-local-address>
                  <priority>priority</priority>
                  <advertise-interval>seconds</advertise-interval>
                  <fast-interval>milliseconds</fast-interval>
                  <inet6-advertise-interval>milliseconds</inet6-advertise-interval>
                  <preempt>...</preempt>
                  <no-preempt/>
                  <accept-data/>
                  <no-accept-data/>
                  <authentication-type>authentication-type-choice
                      </authentication-type>
                  <authentication-key>authentication-key</authentication-key>
                  <track>...</track>
                </vrrp-group>
              </address>
            </inet>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

**Description** VRRP group.

**Contents** <accept-data>—Accept packets destined for virtual IP address.

<advertise-interval>—Advertisement interval.

<authentication-key>—Authentication key.

<authentication-type>—Authentication type.

■ md5—HMAC-MD5-96.

■ simple—Simple password.

<fast-interval>—Fast advertisement interval.

<inet6-advertise-interval>—Inet6 advertisement interval.

<name>—Identifier for VRRP group.

<no-accept-data>—Don't accept packets destined for virtual IP address.

<no-preempt>—Don't allow preemption.

<preempt>—Allow preemption.

<priority>—Virtual router election priority.

<track>—Interfaces to track for VRRP group.

<virtual-address>—One or more virtual IPv4 addresses.

<virtual-inet6-address>—One or more virtual inet6 addresses.

<virtual-link-local-address>—Virtual link-local addresses.

## <vrrp-inet6-group> (configuration/dynamic-profiles/interfaces/interface/unit/family/inet6/address)

---

**Usage**

```

<configuration>
  <dynamic-profiles>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <address>
                <vrrp-inet6-group>
                  <name>name</name>    <!-- identifier -->
                  <virtual-address>...</virtual-address>
                  <virtual-inet6-address>...</virtual-inet6-address>
                  <virtual-link-local-address>virtual-link-local-address
                  </virtual-link-local-address>
                  <priority>priority</priority>
                  <advertise-interval>seconds</advertise-interval>
                  <fast-interval>milliseconds</fast-interval>
                  <inet6-advertise-interval>milliseconds</inet6-advertise-interval>
                  <preempt>...</preempt>
                  <no-preempt/>
                  <accept-data/>
                  <no-accept-data/>
                  <authentication-type>authentication-type-choice
                      </authentication-type>
                  <authentication-key>authentication-key</authentication-key>
                  <track>...</track>
                </vrrp-inet6-group>
              </address>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </dynamic-profiles>
</configuration>

```

**Description** VRRP group.

**Contents** <accept-data>—Accept packets destined for virtual IP address.

<advertise-interval>—Advertisement interval.

<authentication-key>—Authentication key.

<authentication-type>—Authentication type.

■ md5—HMAC-MD5-96.

■ simple—Simple password.

<fast-interval>—Fast advertisement interval.

<inet6-advertise-interval>—Inet6 advertisement interval.

<name>—Identifier for VRRP group.

<no-accept-data>—Don't accept packets destined for virtual IP address.

<no-preempt>—Don't allow preemption.

<preempt>—Allow preemption.

<priority>—Virtual router election priority.

<track>—Interfaces to track for VRRP group.

<virtual-address>—One or more virtual IPv4 addresses.

<virtual-inet6-address>—One or more virtual inet6 addresses.

<virtual-link-local-address>—Virtual link-local addresses.

## <vrrp-inet6-group> (configuration/interfaces/interface/unit/family/inet6/address)

---

**Usage**

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <inet6>
            <address>
              <vrrp-inet6-group>
                <name>name</name>    <!-- identifier -->
                <virtual-address>...</virtual-address>
                <virtual-inet6-address>...</virtual-inet6-address>
                <virtual-link-local-address>virtual-link-local-address
                  </virtual-link-local-address>
                <priority>priority</priority>
                <advertise-interval>seconds</advertise-interval>
                <fast-interval>milliseconds</fast-interval>
                <inet6-advertise-interval>milliseconds</inet6-advertise-interval>
                <preempt>...</preempt>
                <no-preempt/>
                <accept-data/>
                <no-accept-data/>
                <authentication-type>authentication-type-choice
                  </authentication-type>
                <authentication-key>authentication-key</authentication-key>
                <track>...</track>
              </vrrp-inet6-group>
            </address>
          </inet6>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>

```

**Description** VRRP group.

**Contents** <accept-data>—Accept packets destined for virtual IP address.

<advertise-interval>—Advertisement interval.

<authentication-key>—Authentication key.

<authentication-type>—Authentication type.

■ md5—HMAC-MD5-96.

■ simple—Simple password.

<fast-interval>—Fast advertisement interval.

<inet6-advertise-interval>—Inet6 advertisement interval.

<name>—Identifier for VRRP group.

<no-accept-data>—Don't accept packets destined for virtual IP address.

<no-preempt>—Don't allow preemption.

<preempt>—Allow preemption.

<priority>—Virtual router election priority.

<track>—Interfaces to track for VRRP group.

<virtual-address>—One or more virtual IPv4 addresses.

<virtual-inet6-address>—One or more virtual inet6 addresses.

<virtual-link-local-address>—Virtual link-local addresses.

## <vrrp-inet6-group> (configuration/logical-systems/interfaces/interface/unit/family/inet6/address)

---

**Usage**

```

<configuration>
  <logical-systems>
    <interfaces>
      <interface>
        <unit>
          <family>
            <inet6>
              <address>
                <vrrp-inet6-group>
                  <name>name</name>    <!-- identifier -->
                  <virtual-address>...</virtual-address>
                  <virtual-inet6-address>...</virtual-inet6-address>
                  <virtual-link-local-address>virtual-link-local-address
                  </virtual-link-local-address>
                  <priority>priority</priority>
                  <advertise-interval>seconds</advertise-interval>
                  <fast-interval>milliseconds</fast-interval>
                  <inet6-advertise-interval>milliseconds</inet6-advertise-interval>
                  <preempt>...</preempt>
                  <no-preempt/>
                  <accept-data/>
                  <no-accept-data/>
                  <authentication-type>authentication-type-choice
                      </authentication-type>
                  <authentication-key>authentication-key</authentication-key>
                  <track>...</track>
                </vrrp-inet6-group>
              </address>
            </inet6>
          </family>
        </unit>
      </interface>
    </interfaces>
  </logical-systems>
</configuration>

```

**Description** VRRP group.

**Contents** <accept-data>—Accept packets destined for virtual IP address.

<advertise-interval>—Advertisement interval.

<authentication-key>—Authentication key.

<authentication-type>—Authentication type.

■ md5—HMAC-MD5-96.

■ simple—Simple password.

<fast-interval>—Fast advertisement interval.



<inet6-advertise-interval>—Inet6 advertisement interval.

<name>—Identifier for VRRP group.

<no-accept-data>—Don't accept packets destined for virtual IP address.

<no-preempt>—Don't allow preemption.

<preempt>—Allow preemption.

<priority>—Virtual router election priority.

<track>—Interfaces to track for VRRP group.

<virtual-address>—One or more virtual IPv4 addresses.

<virtual-inet6-address>—One or more virtual inet6 addresses.

<virtual-link-local-address>—Virtual link-local addresses.

## <vstp> (configuration/logical-systems/protocols)

---

**Usage** <configuration>  
           <logical-systems>  
           <protocols>  
           <vstp>  
           <disable/>  
           <force-version>*force-version-choice*</force-version>  
           <bpdv-block-on-edge/>  
           <interface>...</interface>  
           <vlan>...</vlan>  
           </vstp>  
           </protocols>  
           </logical-systems>  
           </configuration>

**Description** VLAN Spanning Tree Protocol options.

**Contents** <bpdv-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect).

<disable>—Disable VSTP.

<force-version>—Force protocol version.

■ stp—Spanning tree protocol.

<interface>—Interface options.

<vlan>—VLAN spanning tree options.

## <vstp> (configuration/logical-systems/routing-instances/instance/protocols)

---

**Usage** <configuration>  
           <logical-systems>  
             <routing-instances>  
               <instance>  
                 <protocols>  
                   <bvstp>  
                     <disable/>  
                     <force-version>force-version-choice</force-version>  
                     <bpdv-block-on-edge/>  
                     <interface>...</interface>  
                     <vlan>...</vlan>  
                   </bvstp>  
                 </protocols>  
               </instance>  
             </routing-instances>  
           </logical-systems>  
         </configuration>

**Description** VSTP configuration.

**Contents** <bpdv-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect).

<disable>—Disable VSTP.

<force-version>—Force protocol version.

■ stp—Spanning tree protocol.

<interface>—Interface options.

<vlan>—VLAN spanning tree options.

**<vstp> (configuration/protocols)**

---

**Usage**   <configuration>  
           <protocols>  
           **<vstp>**  
           <disable/>  
           <force-version>*force-version-choice*</force-version>  
           <bpdv-block-on-edge/>  
           <interface>...</interface>  
           <vlan>...</vlan>  
           **</vstp>**  
           </protocols>  
         </configuration>

**Description**   VLAN Spanning Tree Protocol options.

**Contents**   <bpdv-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect).

          <disable>—Disable VSTP.

          <force-version>—Force protocol version.

          ■   stp—Spanning tree protocol.

          <interface>—Interface options.

          <vlan>—VLAN spanning tree options.

**<vstp> (configuration/routing-instances/instance/protocols)**

---

**Usage** <configuration>  
           <routing-instances>  
             <instance>  
               <protocols>  
                 **<vstp>**  
                   <disable/>  
                   <force-version>*force-version-choice*</force-version>  
                   <bpdv-block-on-edge/>  
                   <interface>...</interface>  
                   <vlan>...</vlan>  
                 **</vstp>**  
               </protocols>  
             </instance>  
           </routing-instances>  
         </configuration>

**Description** VSTP configuration.

**Contents** <bpdv-block-on-edge>—Block BPDU on all interfaces configured as edge (BPDU Protect).

<disable>—Disable VSTP.

<force-version>—Force protocol version.

■ stp—Spanning tree protocol.

<interface>—Interface options.

<vlan>—VLAN spanning tree options.