

Provisioning over CAI3G for Resource Configuration

Ericsson Dynamic Activation 1

INTERFACE DESCRIPTION

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Contents

| | | |
|----------|-------------------------|-----------|
| 1 | Introduction | 1 |
| 1.1 | Purpose and Scope | 1 |
| 1.2 | Target Group | 1 |
| 1.3 | Typographic Conventions | 1 |
| 1.4 | Prerequisites | 1 |
| 1.5 | Namespaces | 2 |
| 1.6 | Web Service Interface | 2 |
| 1.7 | MOType | 2 |
| 1.8 | MOld | 3 |
| 1.9 | Sub-objects | 3 |
| 1.10 | Common Data Types | 4 |
| 2 | BGP | 7 |
| 2.1 | Request Data | 7 |
| 2.1.1 | Parameters | 7 |
| 2.2 | Examples | 10 |
| 3 | MPLS | 15 |
| 3.1 | Request Data | 15 |
| 3.1.1 | Parameters | 15 |
| 3.2 | Examples | 16 |
| 4 | OSPF | 21 |
| 4.1 | Request Data | 21 |
| 4.1.1 | Parameters | 21 |
| 4.2 | Examples | 24 |
| 5 | Policy | 29 |
| 5.1 | Request Data | 29 |
| 5.1.1 | Parameters | 29 |
| 5.2 | Examples | 30 |
| 6 | VRF | 35 |
| 6.1 | Request Data | 35 |
| 6.1.1 | Parameters | 35 |
| 6.2 | Examples | 37 |



| | | |
|-----------|---------------------------|-----------|
| 7 | Bridge Domain | 45 |
| 7.1 | Request Data | 45 |
| 7.1.1 | Parameters | 45 |
| 7.2 | Examples | 46 |
| 8 | EVC Bridge | 51 |
| 8.1 | Request Data | 51 |
| 8.1.1 | Parameters | 51 |
| 8.2 | Examples | 52 |
| 9 | IPPIM | 57 |
| 9.1 | Request Data | 57 |
| 9.1.1 | Parameters | 57 |
| 9.2 | Examples | 58 |
| 10 | VPLS | 63 |
| 10.1 | Request Data | 63 |
| 10.1.1 | Parameters | 63 |
| 10.2 | Examples | 64 |
| 11 | Xconnect | 69 |
| 11.1 | Request Data | 69 |
| 11.1.1 | Parameters | 69 |
| 11.2 | Examples | 70 |
| 12 | Ethernet Interface | 75 |
| 12.1 | Request Data | 75 |
| 12.1.1 | Parameters | 75 |
| 12.2 | Examples | 76 |
| 13 | Loopback Interface | 81 |
| 13.1 | Request Data | 81 |
| 13.1.1 | Parameters | 81 |
| 13.2 | Examples | 82 |
| 14 | NVE Interface | 87 |
| 14.1 | Request Data | 87 |
| 14.1.1 | Parameters | 87 |
| 14.2 | Examples | 88 |
| 15 | Serial Interface | 93 |
| 15.1 | Request Data | 93 |
| 15.1.1 | Parameters | 93 |
| 15.2 | Examples | 94 |



| | | |
|-----------------------|--|------------|
| 16 | UNI | 99 |
| 16.1 | Request Data | 99 |
| 16.1.1 | Parameters | 99 |
| 16.2 | Examples | 100 |
| 17 | DHCP Server | 105 |
| 17.1 | Request Data | 105 |
| 17.1.1 | Parameters | 105 |
| 17.2 | Examples | 106 |
| 18 | DHCP Relay Agent | 111 |
| 18.1 | Request Data | 111 |
| 18.1.1 | Parameters | 111 |
| 18.2 | Examples | 112 |
| 19 | Firewall | 117 |
| 19.1 | Request Data | 117 |
| 19.1.1 | Parameters | 117 |
| 19.2 | Examples | 118 |
| 20 | Faults and Errors | 123 |
| 20.1 | Subordinate Resource Configuration Error Codes | 123 |
| 20.2 | CAI3G Error Message Example | 124 |
| Reference List | | 125 |





1 Introduction

This section is an introduction to this document. It contains information about the prerequisites, purpose, scope, and target group for the document. This section also contains explanations of typographic conventions used in this document.

1.1 Purpose and Scope

This document describes the supported operations in the CAI3G interface, for Resource Configuration. This document also declares the types and occurrences of the attributes used in the operations.

This document is not a tutorial of CAI3G; it must be used together with *Generic CAI3G Interface 1.2*, Reference [2].

1.2 Target Group

The target group for this document is as follows:

- System Integrator

For more information about the different target groups, see *Library Overview*, Reference [3].

1.3 Typographic Conventions

Typographic conventions are described in *Library Overview*, Reference [3].

In addition, this document uses the following notations to indicate the occurrence of attributes in different operations:

| | |
|------------|----------------|
| M | Mandatory |
| O | Optional |
| N/A | Not Applicable |

1.4 Prerequisites

To use this document fully, users must meet the following prerequisites:

- Basic knowledge about the Ericsson™ Dynamic Activation (EDA) product
- Knowledge about *Generic CAI3G Interface 1.2*, Reference [2]



1.5 Namespaces

This document refers to the following namespaces:

- CAI3G 1.2 Namespace:

`http://schemas.ericsson.com/cai3g1.2/`

- Provisioning Namespace:

`http://schemas.ericsson.com/scm/`

1.6 Web Service Interface

Resource Configuration provides XML Schema Definition Language (XSD) data model files to use as a base when create CAI3G interface and WSDL files.

The interface.zip file containing the data model files can be found in `/home/dveinstaller/ma/`. It is also possible to download the zip file and store it in an appropriate area by following below instruction:

1. Save the zip file, [Dynamic Activation WSDL and XSD files.zip](#), to a local folder.
2. Unpack the zip file.
3. Go to `\EDAinterface\web-service_provisioning_cai3g1.2\Resource_Configuration`.

Follow the procedure below to create a web service interface:

1. Import the data model and as described in *User Guide for Resource Configuration*, Reference [4].

Note: If importing the feature models from the interface.zip file, the file types.xsd must be imported first. This is to make sure the common data types are available when importing the feature models. For more information about the common data types available, see Section 1.10 on page 4.

2. Create a web service interface as described in *User Guide for Resource Configuration*, Reference [4].

For information about what MOlds and attributes to use for each web service, see the following sections in this document.

1.7 MOType

MOType is a plain text string based on the type `xs:string`. An MO type consists of two parts. One is the namespace of the MO, and the other is the MO name string that is always starting with an alphabetical character in either



upper or lower case, followed by zero or more alphabetical characters, digits or underscores.

Those two parts are connected with symbol @. The syntax of the MOType string is MO_Name@MO_Namespace. The name string of an MO type must follow the regular expression: [A-Za-z] [A-Za-z0-9] *

The MO name together with the MO namespace must be globally unique.

1.8 MOId

MOId is an Extensible Markup Language (XML) fragment containing the MOId parameter-value pairs that are used to identify an MO instance in the interface data model. CAI3G 1.2 standard supports compound MO identifiers or multiple MO identifier. The following is an example of an MOId:

```
<MOId>
    <deviceId>testDevice1</deviceId>
    <asNumber>20</asNumber>
    <groupName>external-peers</ groupName>
</MOId>
```

Example 1 Example of MOId

```
<MOId>
    <serviceInstanceId>{http://schemas.ericsson.com/ma/CA/L3VPN/}L3VPN##serviceId=12
    <deviceId>testDevice1</deviceId>
    <asNumber>20</asNumber>
    <groupName>external-peers</groupName>
</MOId>
```

Example 2 Example of MOId including optional serviceInstanceId

The MOId is defined as a sequence of xs:any element in CAI3G schema file.

The MOId is also the key attribute that must be defined in the top-level element, CreateMODefinition or SetMODefinition, within MOAttributes parameter.

1.9 Sub-objects

Resource Configuration has support for sub-objects in the following ways:

- To create a sub-object in a CREATE or SET operation, a key-attribute and a matching element must be present in the sub-object.
- To update a sub-object in a SET operation, a key-attribute but no matching element must be present in the sub-object.
- To delete a sub-object in a SET operation, a key-attribute and the attribute xsi:nil="true" must be present in the sub-object.



For more information about sub-objects, refer to *Generic CAI3G Interface 1.2*, Reference [2].

1.10 Common Data Types

The common data types below are available in the feature models of Resource Configuration.

Table 1 Common Data Types

| Type | Value/Pattern | Description |
|--------------------|--|--|
| stringType | minLength: 0 maxLength: 255 | Represents a string value. |
| interfaceType | minLength: 1 maxLength: 255 | Represents type of the interface. For example, fast Ethernet or Gigabit Ethernet. |
| Boolean | - | Represents a boolean value. |
| networkId | - | Represents type of network ID which includes ipAddress (ipAddressType) and netmask (ipAddressOrDigitType). |
| policyProtocolType | access,access-internal,aggregate,bgp,direct,dvmrp,esis,isis,l2circuit,l2vpn,msdp,ospf,ospf2,ospf3,pim,rip,rsvpt,static | Represents type of the protocol and different possible protocols available for policy. |



| Type | Value/Pattern | Description |
|------------------------|--|--|
| routeDistinguisherType | ((0 (\+)?([1-9]{1}[0-9]{0,3}) ([1-5]{1}[0-9]{1,4} 6{1}([0-4]{1}[0-9]{3} 5{1}([0-4]{1}[0-9]{2} 5{1}([0-2]{1}[0-9]{1} 3{1}[0-5]{1})))) ([0-9]{1,3}\.){3}[0-9]{1,3}): (0 (\+)?([1-9]{1}[0-9]{0,8}) (\+)?([1-3]{1}[0-9]{1,9}) (\+)?([4]{1}([0-1]{1}[0-9]{8} 2{1}([0-8]{1}[0-9]{7} 9{1}([0-3]{1}[0-9]{6} 4{1}([0-8]{1}[0-9]{5} 9{1}([0-5]{1}[0-9]{4} 6{1}([0-6]{1}[0-9]{3} 7{1}([0-1]{1}[0-9]{2} 2{1}([0-8]{1}[0-9]{1} 9{1}[0-5]{1})))))))))) | Represents type of VRF route distinguisher. |
| unsignedShort | - | Represents unsigned short integer value. |
| ipAddressType | (([0-9]{1,3}\.){3}[0-9]{1,3}) | Represents IP address of the interface. |
| ipAddressOrDigitType | (([0-9]{1,3}\.){3}[0-9]{1,3})\d+ | Represents IP address of the interface. |
| interfaceNumberType | [0-9]*(/[0-9]*)*\.[1-9][0-9]* | Represents the slots/port of the interface. For example , 0/1. |
| ospfInterfaceModeType | nbma, p2mp, p2p | Represents type of OSPF interface mode and possible values. |



2 BGP

This section covers the MO Border Gateway Protocol (BGP). The BGP examples include the optional MOId `serviceInstanceId` to demonstrate how a feature instance can be related to a service instance.

BGP is a standardized exterior gateway protocol designed to exchange routing and reachability information between autonomous systems (AS) on the Internet.

MOType

BGP@http://schemas.ericsson.com/scm/BGP/

2.1 Request Data

2.1.1 Parameters

MOId

Table 2 BGP MOId

| Parameter | Type | Occurrence | Description |
|--------------------------------|-----------------------|------------|---|
| <code>deviceId</code> | Case Sensitive String | Mandatory | Master identifier of the device where the BGP feature is configured. |
| <code>asNumber</code> | String | Mandatory | See description provided in Table 3. |
| <code>groupName</code> | String | Mandatory | Name of the BGP group, recognizing specified BGP systems. |
| <code>serviceInstanceId</code> | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in BGP operations.



Table 3 BGP Operation Parameters

| Node Name | | | Data Type | Occurrence | | | | Description |
|-----------------|--------------|------------|----------------|------------|-----|-----|--------|---|
| | | | | Create | Get | Set | Delete | |
| asNumber | | | unsigned Short | M | N/A | M | N/A | Representing a unique autonomous system. An autonomous system is a network controlled by a single technical administration entity, which forms a routing domain with one or more interior gateway protocols. BGP supports 16 bit and 32 bit autonomous system numbers. |
| groupName | | | stringType | M | N/A | M | N/A | Name of the BGP group, recognizing specified BGP systems. |
| bgpType | | | stringType | O | N/A | O | N/A | BGP type represents internal or external BGP. |
| sourceInterface | | | stringType | O | N/A | O | N/A | Represents the source interface for the update source command. |
| routeReflector | | | stringType | O | N/A | O | N/A | Represent route reflector for configuring BGP using route reflectors. This is applicable if the core network is connected by using full mesh topology. |
| neighbors | | | complex | O | N/A | O | N/A | - |
| | neighbor | | complex | O | N/A | O | N/A | - |
| | | neighborIp | ipAddressType | O | N/A | O | N/A | Specifies IP address of the neighboring router. One or more neighbors can be configured using neighbor command. This is the key attribute for the sub-object neighbor. |
| | | remoteAs | unsigned Short | O | N/A | O | N/A | Specifies number of remote autonomous systems. |
| redistributes | | | complex | O | N/A | O | N/A | - |
| | redistribute | | complex | O | N/A | O | N/A | - |
| | | protocol | stringType | O | N/A | O | N/A | Protocol to which routing information will be redistributed. Networks that are running multiple dynamic protocols may need to redistribute routes. |
| | | processId | unsigned Short | O | N/A | O | N/A | Represents unique id of redistributed protocol. For example, OSPF is used as protocol, protocol id represents ospf id. |



Table 3 BGP Operation Parameters

| Node Name | | | | Occurrence | | | | Description |
|-----------|--|---------------|----------------|------------|-----|-----|--------|--|
| | | | | Create | Get | Set | Delete | |
| | | policyName | stringType | O | N/A | O | N/A | Represents unique name of routing policy. Routing policy can be configured in import and export statements. In an import statement, routing policy is evaluated when routes are imported into routing table from a routing protocol. In an export statement, routing policy is evaluated when exporting routes from routing table into a dynamic routing protocol. |
| | | policyType | stringType | O | N/A | O | N/A | Represents internal or external redistributed protocol type. |
| | | metric | unsigned Short | O | N/A | O | N/A | Represents route metric of the redistributed protocol. |
| vrfs | | | complex | O | N/A | O | N/A | - |
| | | vrf | complex | O | N/A | O | N/A | Represents virtual routing forwarding instance. |
| | | vrfName | stringType | O | N/A | O | N/A | Unique name for the VRF instance. This is the key attribute for the sub-object vrf. |
| | | neighbors | complex | O | N/A | O | N/A | - |
| | | neighbor | complex | O | N/A | O | N/A | - |
| | | neighborIp | ipAddress Type | M | N/A | M | N/A | IP address of VRF neighbor. |
| | | remoteAs | unsigned Short | M | N/A | M | N/A | The number of the remote autonomous system of VRF neighbor. |
| | | redistributes | complex | O | N/A | O | N/A | - |
| | | redistribute | complex | O | N/A | O | N/A | - |
| | | protocol | stringType | O | N/A | O | N/A | Protocol to which VRF routing information will be redistributed. |
| | | processId | unsigned Short | O | N/A | O | N/A | Represents id of redistribute protocol. |
| | | policyName | stringType | O | N/A | O | N/A | Represents unique name of routing policy. Routing policy can be configured in import and export statements. In an import statement, routing policy is evaluated when routes are imported into routing table from a routing protocol. In an export statement, routing policy is evaluated when exporting routes from routing table into a dynamic routing protocol. |
| | | policyType | stringType | O | N/A | O | N/A | Represents internal or external redistributed protocol type. |
| | | metric | unsigned Short | O | N/A | O | N/A | Represents route metric of the redistributed protocol. |



2.2 Examples

Create Example

The following example shows how to configure an external BGP point-to-point peer session and with two neighbor sub-objects and one bgp:vrf sub-object.

Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3">
  <soapenv:Header>
    <cai3:SessionId>${#Project#SESSION_ID}</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>BGP@http://schemas.ericsson.com/scm/BGP</cai3:MOType>
      <cai3:MOId>
        <scm:serviceInstanceId>{http://schemas.ericsson.com/scm:deviceId>CE1</scm:deviceId>
        <bgp:asNumber>20</bgp:asNumber>
        <bgp:groupName>external-peers</bgp:groupName>
      </cai3:MOId>
      <cai3:MOAttributes>
        <bgp:CreateBGP asNumber="20" groupName="external-peers">
          <bgp:asNumber>20</bgp:asNumber>
          <bgp:groupName>external-peers</bgp:groupName>
          <bgp:bgpType>external</bgp:bgpType>
          <bgp:neighbors>
            <bgp:neighbor neighborIp="10.1.2.4">
              <bgp:neighborIp>10.1.2.4</bgp:neighborIp>
              <bgp:remoteAs>22</bgp:remoteAs>
            </bgp:neighbor>
            <bgp:neighbor neighborIp="10.1.2.5">
              <bgp:neighborIp>10.1.2.5</bgp:neighborIp>
              <bgp:remoteAs>22</bgp:remoteAs>
            </bgp:neighbor>
          </bgp:neighbors>
          <bgp:redistributes>
            <bgp:redistribute>
              <bgp:protocol>ospf</bgp:protocol>
              <bgp:processId>12</bgp:processId>
              <bgp:metric>13</bgp:metric>
            </bgp:redistribute>
          </bgp:redistributes>
          <bgp:vrf>
            <bgp:vrf vrfName="customer">
              <bgp:vrfName>customer</bgp:vrfName>
              <bgp:neighbors>
                <bgp:neighbor>
                  <bgp:neighborIp>1.2.3.4</bgp:neighborIp>
                  <bgp:remoteAs>22</bgp:remoteAs>
                </bgp:neighbor>
                <bgp:neighbor>
                  <bgp:neighborIp>1.2.3.5</bgp:neighborIp>
                  <bgp:remoteAs>22</bgp:remoteAs>
                </bgp:neighbor>
              </bgp:neighbors>
              <bgp:redistributes>
                <bgp:redistribute>
                  <bgp:protocol>ospf</bgp:protocol>
                  <bgp:processId>14</bgp:processId>
                  <bgp:metric>15</bgp:metric>
                </bgp:redistribute>
              </bgp:redistributes>
            </bgp:vrf>
          </bgp:vrf>
        </bgp:CreateBGP>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```




Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.
  <S:Header>
    <cai3g:SessionId>e18e1ba7c0374801a447f409a076d72a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <scm:serviceInstanceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:ca
        <scm:deviceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http:
        <bgp:asNumber xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http:
        <bgp:groupName xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http:
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 3 Create BGP

Get Example

The following example shows how to get an external BGP point-to-point peer session with three neighbor sub-objects and one bgp:vrf sub-object.

Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http:
  <soapenv:Header>
    <cai3:SessionId>${#Project#SESSION_ID}</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>BGP@http://schemas.ericsson.com/scm/BGP/</cai3:MOType>
      <cai3:MOId>
        <scm:serviceInstanceId>http://schemas.ericsson.com/ma/CA/L3V
        <scm:deviceId>CE1</scm:deviceId>
        <bgp:asNumber>20</bgp:asNumber>
        <bgp:groupName>external-peers</bgp:groupName>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.
  <S:Header>
    <cai3g:SessionId>e18e1ba7c0374801a447f409a076d72a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseBGP:GetResponseBGP xmlns="http://schemas.ericsson.com/scm/BGP/" xmln
        <bgp:asNumber>20</bgp:asNumber>
        <bgp:groupName>external-peers</bgp:groupName>
        <bgp:neighbors>
          <bgp:neighbor neighborIp="10.1.2.5">
            <bgp:neighborIp>10.1.2.5</bgp:neighborIp>
            <bgp:remoteAs>23</bgp:remoteAs>
          </bgp:neighbor>
          <bgp:neighbor neighborIp="10.1.2.9">
            <bgp:neighborIp>10.1.2.9</bgp:neighborIp>
            <bgp:remoteAs>22</bgp:remoteAs>
          </bgp:neighbor>
          <bgp:neighbor neighborIp="10.1.2.10">
            <bgp:neighborIp>10.1.2.10</bgp:neighborIp>
            <bgp:remoteAs>22</bgp:remoteAs>
          </bgp:neighbor>
        </bgp:neighbors>
        <bgp:redistributes>
```



```

        <bgp: redistribute>
          <bgp: protocol>ospf</bgp: protocol>
          <bgp: processId>12</bgp: processId>
          <bgp: metric>13</bgp: metric>
        </bgp: redistribute>
        <bgp: redistribute>
          <bgp: protocol>ospf</bgp: protocol>
          <bgp: processId>16</bgp: processId>
          <bgp: metric>17</bgp: metric>
        </bgp: redistribute>
      </bgp: redistributes>
    <bgp: vrfs>
      <bgp: vrf vrfName="customer">
        <bgp: vrfName>customer</bgp: vrfName>
        <bgp: neighbors>
          <bgp: neighbor>
            <bgp: neighborIp>1.2.3.7</bgp: neighborIp>
            <bgp: remoteAs>22</bgp: remoteAs>
          </bgp: neighbor>
          <bgp: neighbor>
            <bgp: neighborIp>1.2.3.8</bgp: neighborIp>
            <bgp: remoteAs>22</bgp: remoteAs>
          </bgp: neighbor>
        </bgp: neighbors>
        <bgp: redistributes>
          <bgp: redistribute>
            <bgp: protocol>ospf</bgp: protocol>
            <bgp: processId>14</bgp: processId>
            <bgp: metric>15</bgp: metric>
          </bgp: redistribute>
        </bgp: redistributes>
      </bgp: vrf>
    </bgp: vrfs>
  </GetResponseBGP: GetResponseBGP>
</MOAttributes>
</GetResponse>
</S: Body>
</S: Envelope>

```

Example 4 Get BGP

Set Example

The following example shows how to update an external BGP point-to-point peer session where two neighbor sub-objects are added, one neighbor sub-object is deleted, and one neighbor sub-object is changed.

Set Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://
  <soapenv:Header>
    <cai3:SessionId>${#Project#SESSION_ID}</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>BGP@http://schemas.ericsson.com/scm/BGP</cai3:MOType>
      <cai3:MOId>
        <scm:serviceInstanceId>{http://schemas.ericsson.com/ma/CA/L3VPN/
          <scm:deviceId>CE1</scm:deviceId>
          <bgp:asNumber>20</bgp:asNumber>
          <bgp:groupName>external-peers</bgp:groupName>
        </cai3:MOId>
      <cai3:MOAttributes>
        <bgp:SetBGP asNumber="20" groupName="external-peers">
          <bgp:asNumber>20</bgp:asNumber>
          <bgp:groupName>external-peers</bgp:groupName>
          <bgp:bgpType>external</bgp:bgpType>
          <bgp:neighbors>
            <bgp:neighbor neighborIp="10.1.2.10">
              <bgp:neighborIp>10.1.2.10</bgp:neighborIp>
              <bgp:remoteAs>22</bgp:remoteAs>
            </bgp:neighbor>

```



```

        <bgp:neighbor neighborIp="10.1.2.9">
        <bgp:neighborIp>10.1.2.9</bgp:neighborIp>
        <bgp:remoteAs>22</bgp:remoteAs>
    </bgp:neighbor>
    <bgp:neighbor neighborIp="10.1.2.4" xsi:nil="true"/>
    <bgp:neighbor neighborIp="10.1.2.5">
    <bgp:remoteAs>23</bgp:remoteAs>
    </bgp:neighbor>
</bgp:neighbors>
<bgp:redistributes>
    <bgp:redistribute>
        <bgp:protocol>ospf</bgp:protocol>
        <bgp:processId>12</bgp:processId>
        <bgp:metric>13</bgp:metric>
    </bgp:redistribute>
    <bgp:redistribute>
        <bgp:protocol>ospf</bgp:protocol>
        <bgp:processId>16</bgp:processId>
        <bgp:metric>17</bgp:metric>
    </bgp:redistribute>
</bgp:redistributes>
<bgp:vrf>
    <bgp:vrf vrfName="customer">
        <bgp:neighbors>
            <bgp:neighbor>
                <bgp:neighborIp>1.2.3.7</bgp:neighborIp>
                <bgp:remoteAs>22</bgp:remoteAs>
            </bgp:neighbor>
            <bgp:neighbor>
                <bgp:neighborIp>1.2.3.8</bgp:neighborIp>
                <bgp:remoteAs>22</bgp:remoteAs>
            </bgp:neighbor>
        </bgp:neighbors>
        <bgp:redistributes>
            <bgp:redistribute>
                <bgp:protocol>ospf</bgp:protocol>
                <bgp:processId>14</bgp:processId>
                <bgp:metric>15</bgp:metric>
            </bgp:redistribute>
        </bgp:redistributes>
    </bgp:vrf>
</bgp:vrf>
</bgp:SetBGP>
</cai3:MOAttributes>
</cai3:Set>
</soapenv:Body>
</soapenv:Envelope>

```

Set Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.
    <S:Header>
        <cai3g:SessionId>e18e1ba7c0374801a447f409a076d72a</cai3g:SessionId>
    </S:Header>
    <S:Body>
        <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
    </S:Body>
</S:Envelope>

```

Example 5 Set BGP

Delete Example

The following example shows how to delete an external BGP point-to-point peer session.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3g/1.2/">
  <soapenv:Header>
    <cai3:SessionId>${#Project#SESSION_ID}</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>BGP@http://schemas.ericsson.com/scm/BGP/</cai3:MOType>
      <cai3:MOId>
        <scm:serviceInstanceId>{http://schemas.ericsson.com/ma/CA/L3VPN/}L3VPN##serviceId=1
        <scm:deviceId>CE1</scm:deviceId>
        <bgp:asNumber>20</bgp:asNumber>
        <bgp:groupName>external-peers</bgp:groupName>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g/1.2/">
  <S:Header>
    <cai3g:SessionId>e18e1ba7c0374801a447f409a076d72a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <scm:serviceInstanceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/cai3g/1.2/">
        <scm:deviceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/cai3g/1.2/">
        <bgp:asNumber xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/cai3g/1.2/">
        <bgp:groupName xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/cai3g/1.2/">
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 6 Delete BGP



3 MPLS

This section covers the MO Multiprotocol Label Switching (MPLS).

MOType

MPLS@http://schemas.ericsson.com/scm/MPLS/

3.1 Request Data

3.1.1 Parameters

MOId

Table 4 MPLS MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|---|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in MPLS operations.

Table 5 MPLS Operation Parameters

| Node Name | | Data Type | Occurrence | | | | Description |
|------------------|-----------------|------------|------------|-----|-----|--------|--|
| | | | Create | Get | Set | Delete | |
| logicalInterface | | stringType | M | N/A | M | N/A | Interface to use for LDP identifier address. Loopback interface is mostly configured as logical interface. |
| interfaces | | - | O | N/A | O | N/A | Represents PE router interface on which MPLS will be enabled. |
| | interface | - | O | N/A | O | N/A | - |
| | interfaceType | stringType | M | N/A | M | N/A | Specifies the type of interface to be configured. For example, Fast Ethernet or Gigabit Ethernet. |
| | interfaceNumber | stringType | M | N/A | M | N/A | Represents the slots/port of the interface. For example, 0/1. |



3.2 Examples

Create Example

The following example shows how to create three MPLS interfaces.

```
Create Request:
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:mpls="http://schemas.ericsson.com/scm/MPLS/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>ae0206a7fc9d465d8a4f86f9504954ba </cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>MPLS@http://schemas.ericsson.com/scm/MPLS/</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mpls:CreateMPLS>
          <mpls:logicalInterface>lo0.0</mpls:logicalInterface>
          <mpls:interfaces>
            <mpls:interface>
              <mpls:interfaceType>em</mpls:interfaceType>
              <mpls:interfaceNumber>1.0</mpls:interfaceNumber>
            </mpls:interface>
            <mpls:interface>
              <mpls:interfaceType>em</mpls:interfaceType>
              <mpls:interfaceNumber>2.0</mpls:interfaceNumber>
            </mpls:interface>
            <mpls:interface>
              <mpls:interfaceType>em</mpls:interfaceType>
              <mpls:interfaceNumber>3.5</mpls:interfaceNumber>
            </mpls:interface>
          </mpls:interfaces>
        </mpls:CreateMPLS>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>ae0206a7fc9d465d8a4f86f9504954ba</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <cai3:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:mpls="http://schemas.ericsson.com/scm/MPLS/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
          xmlns:types="http://schemas.ericsson.com/scm/Types/">Device1</cai3:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 7 Create MPLS

Get Example

The following example shows how to get all MPLS interfaces.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:types="http://schemas.
ericsson.com/scm/Types/" xmlns:mpls="http://schemas.ericsson.com/scm/MPLS/">
  <soapenv:Header>
    <cai3:SessionId>ae0206a7fc9d465d8a4f86f9504954ba</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOTYPE>MPLS@http://schemas.ericsson.com/scm/MPLS/</cai3:MOTYPE>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>ae0206a7fc9d465d8a4f86f9504954ba</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
      <MOAttributes>
        <GetResponseMPLS:GetResponseMPLS xmlns="http://schemas.ericsson.
.com/scm/MPLS/" xmlns:GetResponseMPLS="http://schemas.ericsson.
.com/scm/MPLS/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:mpls="http://schemas.ericsson.com/scm/MPLS/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://
schemas.ericsson.com/scm/Types/">
          <mpls:logicalInterface>lo0.0</mpls:logicalInterface>
          <mpls:interfaces>
            <mpls:interface>
              <mpls:interfaceType>em</mpls:interfaceType>
              <mpls:interfaceNumber>1.0</mpls:interfaceNumber>
            </mpls:interface>
            <mpls:interface>
              <mpls:interfaceType>em</mpls:interfaceType>
              <mpls:interfaceNumber>2.0</mpls:interfaceNumber>
            </mpls:interface>
            <mpls:interface>
              <mpls:interfaceType>em</mpls:interfaceType>
              <mpls:interfaceNumber>3.5</mpls:interfaceNumber>
            </mpls:interface>
          </mpls:interfaces>
        </GetResponseMPLS:GetResponseMPLS>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 8 Get MPLS

Set Example

The following example shows how to update one MPLS interface.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:mpls="http://
schemas.ericsson.com/scm/MPLS/" xmlns:typ="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>ae0206a7fc9d465d8a4f86f9504954ba</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>MPLS@http://schemas.ericsson.com/scm/MPLS/</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mpls:SetMPLS>
          <mpls:logicalInterface>lo1.0</mpls:logicalInterface>
          <mpls:interfaces/>
        </mpls:SetMPLS>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>ae0206a7fc9d465d8a4f86f9504954ba</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

Example 9 Set MPLS

Delete Example

The following example shows how to delete all MPLS interfaces.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:types="http://schemas.
ericsson.com/scm/Types/" xmlns:mpls="http://schemas.ericsson.com/scm/MPLS/">
  <soapenv:Header>
    <cai3:SessionId>0ae0206a7fc9d465d8a4f86f9504954ba</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOTYPE>MPLS@http://schemas.ericsson.com/scm/MPLS/</cai3:MOTYPE>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>ae0206a7fc9d465d8a4f86f9504954ba</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <cai3:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:mpls="http://schemas.ericsson.com/scm/MPLS/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://
schemas.ericsson.com/scm/Types/">Device1</cai3:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 10 Delete MPLS



4 OSPF

This section covers the MO Open Shortest Path First (OSPF).

OSPF is a routing protocol that uses a link state routing algorithm operating within a single Autonomous System (AS). It is widely used as Interior Gateway Protocol (IGP) in large enterprise networks.

MOType

OSPF@<http://schemas.ericsson.com/scm/OSPF/>

4.1 Request Data

4.1.1 Parameters

MOId

Table 6 OSPF MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|--|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| ospfId | ipAddressOrDigitType | Mandatory | Represents unique id of OSPF process and is a numeric value local to the router. It does not have to match process ids on other routers. It is possible to run multiple OSPF processes on the same router, but is not recommended as it creates multiple database instances that add extra overhead to the router. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in OSPF operations.



Table 7 OSPF Operation Parameters

| Node Name | | Data Type | Occurrence | | | | Description |
|---------------|--------------|-----------------------|------------|-----|-----|--------|--|
| | | | Create | Get | Set | Delete | |
| ospfld | | ipAddress OrDigitType | M | N/A | M | N/A | Represents unique id of OSPF process and is a numeric value local to the router. It does not have to match process ids on other routers. It is possible to run multiple OSPF processes on the same router, but is not recommended as it creates multiple database instances that add extra overhead to the router. |
| networks | | complex | O | N/A | O | N/A | - |
| | network | complex | O | N/A | O | N/A | - |
| | ipAddress | ipAddress Type | M | N/A | M | N/A | Represents IP address of the interface. |
| | wildcardMask | ipAddress Type | M | N/A | M | N/A | Represents the mask which is used as a shortcut and it helps putting a list of interfaces in the same area with one line configuration line. The mask contains wild card bits where 0 is a match and 1 is a "do not care" bit. For example 0.0.255.255 indicates a match in the first two bytes of the network number. |
| | areaid | ipAddress OrDigitType | O | N/A | O | N/A | The area for the interface to exist in. The areaid can be an integer between 0 and 4294967295, or can take a form similar to an IP address A.B.C.D. |
| neighbors | | complex | O | N/A | O | N/A | - |
| | neighbor | complex | O | N/A | O | N/A | - |
| | neighborip | ipAddress Type | M | N/A | M | N/A | Specifies a neighbor IP address of the format A.B.C.D. |
| | neighborCost | unsigned Short | O | N/A | O | N/A | Explicitly specifies the cost of sending a packet on an OSPF interface. |
| redistributes | | complex | O | N/A | O | N/A | - |
| | redistribute | complex | O | N/A | O | N/A | - |
| | protocol | stringType | O | N/A | O | N/A | Protocol to which VRF routing information will be redistributed. |
| | processId | unsigned Short | O | N/A | O | N/A | Represents id of redistributed protocol. |
| | poiicyName | stringType | O | N/A | O | N/A | Name of the import or export policy. |
| | policyType | stringType | O | N/A | O | N/A | Represents redistribute protocol type – internal or external. |
| | metric | unsigned Short | O | N/A | O | N/A | Represents route metric of the redistributed protocol. |
| interfaces | | complex | O | N/A | O | N/A | - |
| | interface | complex | O | N/A | O | N/A | - |



Table 7 OSPF Operation Parameters

| Node Name | | | Data Type | Occurrence | | | | Description |
|-----------|--|--------------------|----------------------|------------|-----|-----|--------|--|
| | | | | Create | Get | Set | Delete | |
| | | interfaceType | interfaceNumberType | M | N/A | M | N/A | Specifies the type of interface to be configured. For example, Fast Ethernet or Gigabit Ethernet. |
| | | interfaceNumber | interfaceNumberType | M | N/A | M | N/A | Represents the slots/port of the interface. For example, 0/1. |
| | | areaid | ipAddressOrDigitType | O | N/A | O | N/A | The area for the interface to exist in. The areaid can be an integer between 0 and 4294967295, or can take a form similar to an IP address A.B.C.D. |
| | | cost | unsigned Short | O | N/A | O | N/A | Explicitly specifies the cost of sending a packet on an OSPF interface. |
| | | retransmitInterval | unsigned Short | O | N/A | O | N/A | Specifies the number of seconds between link-state advertisement (LSA) retransmissions for adjacencies belonging to an OSPF interface. |
| | | transmitDelay | unsigned Short | O | N/A | O | N/A | Sets the estimated number of seconds required to send a link-state update packet on an OSPF interface. |
| | | priority | unsigned Byte | O | N/A | O | N/A | Sets priority to help determine the OSPF designated router for a network. |
| | | helloInterval | unsigned Byte | O | N/A | O | N/A | Specifies the length of time between the hello packets that the IOS software sends on an OSPF interface. |
| | | deadInterval | unsigned Short | O | N/A | O | N/A | Sets the number of seconds that a device must wait before it declares a neighbor OSPF router down because it has not received a hello packet. |
| | | interfaceMode | interfaceModeType | O | N/A | O | N/A | Sets the interface to run in nonbroadcast mode. |
| | | pollInterval | unsigned Short | O | N/A | O | N/A | Specifies the length of time, in seconds, before the routing device sends hello packets out of the interface before it establishes adjacency with a neighbor. Routing devices send hello packets for a longer interval on nonbroadcast networks to minimize the bandwidth required on slow WAN links. The range is from 1 through 255 seconds. By default, the device sends hello packets out the interface every 120 seconds before it establishes adjacency with a neighbor. |



Table 7 OSPF Operation Parameters

| Node Name | | | | Data Type | Occurrence | | | | Description |
|-----------|--|--|------------------|----------------|------------|-----|-----|--------|---|
| | | | | | Create | Get | Set | Delete | |
| | | | dynamicNeighbors | boolean | O | N/A | O | N/A | Specifies the IP address of the neighboring device. OSPF routing devices normally discover their neighbors dynamically by listening to the broadcast or multicast hello packets on the network. |
| | | | neighbors | complex | O | N/A | O | N/A | - |
| | | | neighbor | complex | O | N/A | O | N/A | - |
| | | | neighborIp | ipAddress Type | M | N/A | M | N/A | Specifies a neighbor IP address of the format A.B.C.D. |
| | | | eligible | boolean | O | N/A | O | N/A | Keyword that decides neighbor to be a designated router |
| | | | neighborCost | unsigned Short | O | N/A | O | N/A | Explicitly specifies the cost of sending a packet on an OSPF interface. |
| vrfName | | | | stringType | O | N/A | O | N/A | Represents the name of virtual routing forwarding instance to configure OSPF protocol for enabling routing between PE and CE. |
| routerId | | | | ipAddress Type | O | N/A | O | N/A | Represents the identity of a specific device within an OSPF database. |

4.2 Examples

Create Example

The following example shows how to configure OSPF network.



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ospf="http://schemas.
ericsson.com/scm/OSPF/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>OSPF@http://schemas.ericsson.com/scm/OSPF</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:ospfId>0.0.0.3</cai3:ospfId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ospf:CreateOSPF ospfId="0.0.0.3">
          <ospf:ospfId>0.0.0.3</ospf:ospfId>
          <ospf:interfaces>
            <ospf:interface>
              <ospf:interfaceType>em</ospf:interfaceType>
              <ospf:interfaceNumber>3</ospf:interfaceNumber>
              <ospf:retransmitInterval>4500</ospf:retransmitInterval>
              <ospf:transmitDelay>2500</ospf:transmitDelay>
              <ospf:priority>30</ospf:priority>
              <ospf:helloInterval>60</ospf:helloInterval>
              <ospf:deadInterval>3500</ospf:deadInterval>
              <ospf:interfaceMode>p2mp</ospf:interfaceMode>
              <ospf:pollInterval>5000</ospf:pollInterval>
              <ospf:dynamicNeighbors>true</ospf:dynamicNeighbors>
            </ospf:interface>
            <ospf:interface>
              <ospf:interfaceType>em</ospf:interfaceType>
              <ospf:interfaceNumber>2</ospf:interfaceNumber>
              <ospf:pollInterval>5000</ospf:pollInterval>
              <ospf:dynamicNeighbors>false</ospf:dynamicNeighbors>
              <ospf:neighbors>
                <ospf:neighbor>
                  <ospf:neighborIp>44.44.44.44</ospf:neighborIp>
                  <ospf:eligible>true</ospf:eligible>
                </ospf:neighbor>
              </ospf:neighbors>
            </ospf:interface>
          </ospf:interfaces>
        </ospf:CreateOSPF>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <cai3:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ospf="http://schemas.ericsson.com/scm/OSPF/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">Device1</cai3:deviceId>
        <cai3:ospfId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ospf="http://schemas.ericsson.com/scm/OSPF/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">0.0.0.3</cai3:ospfId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 11 Create OSPF



Get Example

The following example shows how to get the OSPF network.

Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:ospf="http://schemas.ericsson.com/scm/OSPF/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>OSPF</cai3:MOType>
      <cai3:MOId>
        <ospf:ospfId>0.0.0.3</ospf:ospfId>
        <ospf:deviceId>Device1</ospf:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
      <MOAttributes>
        <GetResponseOSPF:GetResponseOSPF xmlns="http://schemas.ericsson.com/scm/OSPF/" xmlns:GetResponseOSPF="http://schemas.ericsson.com/scm/OSPF/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:ospf="http://schemas.ericsson.com/scm/OSPF/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:types="http://schemas.ericsson.com/scm/Types/">
          <ospf:ospfId>0.0.0.3</ospf:ospfId>
          <ospf:interfaces>
            <ospf:interface>
              <ospf:interfaceType>em</ospf:interfaceType>
              <ospf:interfaceNumber>3</ospf:interfaceNumber>
              <ospf:retransmitInterval>4500</ospf:retransmitInterval>
              <ospf:transmitDelay>2500</ospf:transmitDelay>
              <ospf:priority>30</ospf:priority>
              <ospf:helloInterval>60</ospf:helloInterval>
              <ospf:deadInterval>3500</ospf:deadInterval>
              <ospf:interfaceMode>p2mp</ospf:interfaceMode>
              <ospf:pollInterval>5000</ospf:pollInterval>
              <ospf:dynamicNeighbors>true</ospf:dynamicNeighbors>
            </ospf:interface>
            <ospf:interface>
              <ospf:interfaceType>em</ospf:interfaceType>
              <ospf:interfaceNumber>2</ospf:interfaceNumber>
              <ospf:pollInterval>5000</ospf:pollInterval>
              <ospf:dynamicNeighbors>true</ospf:dynamicNeighbors>
              <ospf:neighbors>
                <ospf:neighbor>
                  <ospf:neighborIp>44.44.44.44</ospf:neighborIp>
                  <ospf:eligible>true</ospf:eligible>
                </ospf:neighbor>
              </ospf:neighbors>
            </ospf:interface>
          </ospf:interfaces>
        </GetResponseOSPF:GetResponseOSPF>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 12 Get OSPF



Set Example

The following example shows how to update the OSPF network.

Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:ospf="http://schemas.ericsson.com/scm/OSPF/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>OSPF@http://schemas.ericsson.com/scm/OSPF/</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:ospfId>0.0.0.3</cai3:ospfId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ospf:SetOSPF ospfId="0.0.0.3">
          <ospf:ospfId>0.0.0.3</ospf:ospfId>
          <ospf:interfaces>
            <ospf:interface>
              <ospf:interfaceType>em</ospf:interfaceType>
              <ospf:interfaceNumber>5</ospf:interfaceNumber>
              <ospf:retransmitInterval>20</ospf:retransmitInterval>
              <ospf:transmitDelay>80</ospf:transmitDelay>
              <ospf:priority>5</ospf:priority>
              <ospf:helloInterval>10</ospf:helloInterval>
              <ospf:deadInterval>3500</ospf:deadInterval>
            </ospf:interface>
          </ospf:interfaces>
        </ospf:SetOSPF>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
  </S:Body>
</S:Envelope>
```

Example 13 Set OSPF

Delete Example

The following example shows how to delete an OSPF network.



Delete request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ospf="http://
schemas.ericsson.com/scm/OSPF/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>OSPF@http://schemas.ericsson.com/scm/OSPF/</cai3:MOType>
      <cai3:MOId>
        <ospf:ospfId>0.0.0.3</ospf:ospfId>
        <ospf:deviceId>Device1</ospf:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>59cdd0e6ca464297828ed3dc01702d69</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <ospf:ospfId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ospf="http://schemas.ericsson.com/scm/OSPF/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://
schemas.ericsson.com/scm/Types/">0.0.0.3</ospf:ospfId>
        <ospf:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ospf="http://schemas.ericsson.com/scm/OSPF/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://schemas.
ericsson.com/scm/Types/">Device1</ospf:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 14 Delete OSPF

5 Policy

This section covers the MO `Policy`.

MOType

`Policy@http://schemas.ericsson.com/scm/Policy/`

5.1 Request Data

5.1.1 Parameters

MOId

Table 8 Policy MOId

| Parameter | Type | Occurrence | Description |
|--------------------------------|-----------------------|------------|---|
| <code>policyName</code> | Case Sensitive String | Mandatory | |
| <code>deviceId</code> | Case Sensitive String | Mandatory | Master identifier of the device. |
| <code>serviceInstanceId</code> | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in `Policy` operations.

Table 9 Policy Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|-------------------------|---------------------------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| <code>policyName</code> | <code>stringType</code> | M | N/A | M | N/A | Name of the import or export policy. Each VPN must have a policy that defines how routes are exported or imported from or into the PE router's VRF table. |
| <code>protocol</code> | <code>policyProtocolType</code> | O | N/A | O | N/A | Represents protocol on which Policy has to be applied. It could be any of the dynamic protocols, for example BGP or OSPF. |
| <code>acceptTerm</code> | <code>stringType</code> | O | N/A | O | N/A | Term name of policy for the accept statement. This represents the term for accepting the routes. |
| <code>rejectTerm</code> | <code>stringType</code> | O | N/A | O | N/A | Term name for the reject statement. Import or export policy must contain a reject term. This term in the policy rejects all other routes. |



5.2 Examples

Create Example

The following example shows how to create a routing policy called “policy”.

Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:pol="http://schemas.ericsson.com/scm/policy/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Policy@http://schemas.ericsson.com/scm/policy/</cai3:MOType>
      <cai3:MOId>
        <pol:policyName>policy</pol:policyName>
        <pol:deviceId>Device1</pol:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <pol:CreatePolicy policyName="policy">
          <pol:policyName>policy</pol:policyName>
          <pol:protocol>bgp</pol:protocol>
          <pol:acceptTerm>1</pol:acceptTerm>
          <pol:rejectTerm>2</pol:rejectTerm>
        </pol:CreatePolicy>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <pol:policyName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:pol="http://schemas.ericsson.com/scm/policy/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://schemas.ericsson.com/scm/Types/">policy</pol:policyName>
        <pol:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:pol="http://schemas.ericsson.com/scm/policy/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://schemas.ericsson.com/scm/Types/">Device1</pol:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 15 Create Policy

Get Example

The following example shows how to get a routing policy called “policy”.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:pol="http://
schemas.ericsson.com/scm/policy/" xmlns:types="http://schemas.ericsson.
com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOTYPE>Policy@http://schemas.ericsson.com/
scm/policy/</cai3:MOTYPE>
      <cai3:MOId>
        <pol:policyName>policy</pol:policyName>
        <pol:deviceId>Device1</pol:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponsePolicy:GetResponsePolicy xmlns="http://schemas.
ericsson.com/scm/policy/" xmlns:GetResponsePolicy="http://schemas.
ericsson.com/scm/policy/" xmlns:cai3="http://schemas.
ericsson.com/cai3g1.2/" xmlns:pol="http://schemas.ericsson.com/
scm/policy/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:types="http://schemas.ericsson.com/scm/Types/">
          <pol:policyName>policy</pol:policyName>
          <pol:protocol>bgp</pol:protocol>
          <pol:acceptTerm>1</pol:acceptTerm>
          <pol:rejectTerm>2</pol:rejectTerm>
        </GetResponsePolicy:GetResponsePolicy>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 16 Get Policy

Set Example

The following example shows how to update a routing policy called “policy”.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:pol="http://
schemas.ericsson.com/scm/policy/">
  <soapenv:Header>
    <cai3:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Policy@http://schemas.ericsson.com/scm/policy/</cai3:MOType>
      <cai3:MOId>
        <pol:policyName>policy</pol:policyName>
        <pol:deviceId>Device1</pol:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <pol:SetPolicy policyName="policy">
          <pol:policyName>policy</pol:policyName>
          <pol:protocol>bgp</pol:protocol>
          <pol:acceptTerm>2</pol:acceptTerm>
          <pol:rejectTerm>3</pol:rejectTerm>
        </pol:SetPolicy>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

Example 17 Set Policy

Delete Example

The following example shows how to delete a routing policy called “policy”.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:pol="http://schemas.ericsson.com/scm/policy/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>Policy@http://schemas.ericsson.com/scm/policy/</cai3:MOType>
      <cai3:MOId>
        <pol:policyName>policy</pol:policyName>
        <pol:deviceId>Device1</pol:deviceId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94250fb903df4416b23fc3f931e3b15b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <pol:policyName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:pol="http://schemas.ericsson.com/scm/policy/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://schemas.ericsson.com/scm/Types/">policy</pol:policyName>
        <pol:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:pol="http://schemas.ericsson.com/scm/policy/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://schemas.ericsson.com/scm/Types/">Device1</pol:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 18 Delete Policy



6 VRF

This section covers the MO Virtual Routing and Forwarding (VRF).

VRF is a technology that allows multiple instances of a routing table to co-exist within the same router at the same time.

MOType

VRF@http://schemas.ericsson.com/scm/VRF/

6.1 Request Data

6.1.1 Parameters

MOId

Table 10 VRF MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|---|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device where the VRF feature is configured. |
| vrfName | Case Sensitive String | Mandatory | |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in VRF operations.

Table 11 VRF Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|-----------|------------------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| vrfName | stringType | M | N/A | M | N/A | Name of the VRF instance. |
| rd | routeDistinguisherType | M | N/A | M | N/A | Route Distinguisher (RD), is a unique number prepended to each route within a VRF to identify it as belonging to that particular VRF or customer. RD can have the format as either an Autonomous System (AS) number and an arbitrary number (xxx.y.) or as an IP address and arbitrary number (A.B.C.D:y). An RD is carried along with a route via MP-BGP when exchanging VPN routes with other Provider Edge (PE) routers. |



Table 11 VRF Operation Parameters

| Node Name | | | | Data Type | Occurrence | | | | Description |
|-----------|--------|-----------|------------|------------------------|------------|-----|-----|--------|--|
| | | | | | Create | Get | Set | Delete | |
| rtImports | | | | - | O | N/A | O | N/A | Represents import route target. Route targets are used to share routes among VRFs. Route target takes the same form as RD. |
| | Import | | | routeDistinguisherType | O | N/A | O | N/A | - |
| rtExport | | | | - | O | N/A | O | N/A | Represents export route target for the specified VRF to export a route from routing table. |
| | export | | | routeDistinguisherType | O | N/A | O | N/A | - |
| vrfTarget | | | | stringType | O | N/A | O | N/A | Used to configure a VRF target community using the VRF target statement. VRF target statement causes default VRF import and export policies to be generated. These policies accept and tag routes with the specified target community. The import and export policies override the default policies generated when configuring the VRF target statement. If the import and export options of the VRF target statement are not configured, the specified community string is applied in both directions.The syntax of vrfTarget is x:y. |
| bgps | | | | - | O | N/A | O | N/A | - |
| | bgp | | | - | O | N/A | O | N/A | Represents the BGP protocol to configure BGP sessions with Customer Edge (CE) router. |
| | | asNumber | | unsigned Short | O | N/A | O | N/A | Representing a unique autonomous system. An autonomous system is a network controlled by a single technical administration entity, which forms a routing domain with one or more interior gateway protocols. BGP supports 16 bit and 32 bit autonomous system numbers. |
| | | groupName | | stringType | O | N/A | O | N/A | Name of the BGP group, recognizing specified BGP systems. |
| | | bgpType | | stringType | O | N/A | O | N/A | BGP type represents internal or external BGP. |
| | | neighbors | | - | O | N/A | O | N/A | - |
| | | | neighbor | - | O | N/A | O | N/A | - |
| | | | neighborIp | ipAddressType | M | N/A | M | N/A | Specifies IP address of the neighboring router. One or more neighbors can be configured using neighbor command. |
| | | | remoteAs | unsigned Short | M | N/A | M | N/A | Specifies number of remote autonomous systems. |



Table 11 VRF Operation Parameters

| Node Name | | | | Data Type | Occurrence | | | | Description |
|-----------|--|--|-----------------|----------------|------------|-----|-----|--------|---|
| | | | | | Create | Get | Set | Delete | |
| | | | redistributes | - | O | N/A | O | N/A | - |
| | | | redistribute | - | O | N/A | O | N/A | - |
| | | | protocol | stringType | O | N/A | O | N/A | Protocol to which VRF routing information will be redistributed. |
| | | | processId | unsigned Short | O | N/A | O | N/A | Represents id of redistribute protocol. |
| | | | policyName | stringType | O | N/A | O | N/A | Represents unique name of routing policy. |
| | | | policyType | stringType | O | N/A | O | N/A | Represents internal or external redistributed protocol type. |
| | | | metric | unsigned Short | O | N/A | O | N/A | Represents route metric of the redistributed protocol. |
| | | | vrfInterface | - | O | N/A | O | N/A | Represents the interfaces associated to the VRF. |
| | | | interface | - | O | N/A | O | N/A | |
| | | | interfaceType | stringType | M | N/A | M | N/A | Represents type of the interface. For example, fast Ethernet or Gigabit Ethernet. |
| | | | interfaceNumber | stringType | M | N/A | M | N/A | Represents the slots/port of the interface. |

6.2 Examples

Create Example

The following example shows how to create a VRF routing instance called "vrf1".

Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:vrf="http://schemas.ericsson.com/scm/VRF/"
xmlns:types="http://schemas.ericsson.com/scm/Types/"
xmlns:bgp="http://schemas.ericsson.com/scm/BGP/">
  <soapenv:Header>
    <cai3:SessionId>c074cc6edfc647af96dd6181c048f182</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>VRF@http://schemas.ericsson.com/scm/VRF/</cai3:MOType>
      <cai3:MOId>
        <vrf:vrfName>vrf1</vrf:vrfName>
        <vrf:deviceId>Device1</vrf:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <vrf:CreateVRF vrfName="vrf1">
          <vrf:vrfName>vrf1</vrf:vrfName>
          <vrf:rd>100:1</vrf:rd>
          <vrf:vrfTarget>100:1</vrf:vrfTarget>
          <vrf:bgps>
            <vrf:bgp>
              <vrf:asNumber>4500</vrf:asNumber>
              <vrf:groupName>ebgp</vrf:groupName>
            </vrf:bgp>
          </vrf:bgps>
        </vrf:CreateVRF>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```



```
<vrf:bgpType>external</vrf:bgpType>
<vrf:neighbors>
  <vrf:neighbor>
    <vrf:neighborIp>1.1.1.1</vrf:neighborIp>
    <vrf:remoteAs>1111</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.2</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.3</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.4</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.5</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.6</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.7</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.8</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.9</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.10</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.21</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.22</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.23</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.24</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
  <vrf:neighbor>
    <vrf:neighborIp>2.2.2.25</vrf:neighborIp>
    <vrf:remoteAs>2222</vrf:remoteAs>
  </vrf:neighbor>
</vrf:neighbors>
</vrf:bgp>
</vrf:bgps>
<vrf:interfaces>
  <vrf:interface>
    <vrf:interfaceType>em</vrf:interfaceType>
    <vrf:interfaceNumber>1</vrf:interfaceNumber>
  </vrf:interface>
  <vrf:interface>
    <vrf:interfaceType>em</vrf:interfaceType>
    <vrf:interfaceNumber>2</vrf:interfaceNumber>
  </vrf:interface>
  <vrf:interface>
    <vrf:interfaceType>em</vrf:interfaceType>
```



```

        <vrf:interfaceNumber>3</vrf:interfaceNumber>
      </vrf:interface>
    </vrf:interface>
    <vrf:interfaceType>em</vrf:interfaceType>
    <vrf:interfaceNumber>4</vrf:interfaceNumber>
  </vrf:interface>
</vrf:interfaces>
</vrf:CreateVRF>
</cai3:MOAttributes>
</cai3:Create>
</soapenv:Body>
</soapenv:Envelope>

```

Create Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c074cc6edfc647af96dd6181c048f182</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <vrf:vrfName xmlns:bgp="http://schemas.ericsson.com/scm/BGP/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://
schemas.ericsson.com/scm/Types/" xmlns:vrf="http://schemas.ericsson.
com/scm/VRF/">vrf1</vrf:vrfName>
        <vrf:deviceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://
schemas.ericsson.com/scm/Types/" xmlns:vrf="http://schemas.ericsson.
com/scm/VRF/">Device1</vrf:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>

```

Example 19 Create VRF

Get Example

The following example shows how to get a VRF routing instance called “vrf1”.

Get Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:vrf="http://schemas.
ericsson.com/scm/VRF/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>c074cc6edfc647af96dd6181c048f182</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOTYPE>VRF@http://schemas.ericsson.com/scm/VRF/</cai3:MOTYPE>
      <cai3:MOId>
        <vrf:vrfName>vrf1</vrf:vrfName>
        <vrf:deviceId>Device1</vrf:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>

```

Get Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c074cc6edfc647af96dd6181c048f182</cai3g:SessionId>
  </S:Header>

```



```
<S:Body>
  <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
    <MOAttributes>
      <GetResponseVRF:GetResponseVRF xmlns="http://schemas.ericsson.com/scm/VRF/"
        xmlns:GetResponseVRF="http://schemas.ericsson.com/scm/VRF/" xmlns:cai3=
          "http://schemas.ericsson.com/cai3g1.2/" xmlns:soapenv="http://schemas.
          xmlsoap.org/soap/envelope/" xmlns:types="http://schemas.ericsson.com/scm/Types/"
          xmlns:vrf="http://schemas.ericsson.com/scm/VRF/">
        <vrf:vrfName>vrf1</vrf:vrfName>
        <vrf:rd>100:1</vrf:rd>
        <vrf:vrfTarget>100:1</vrf:vrfTarget>
        <vrf:bgps>
          <vrf:bgp>
            <vrf:asNumber>4500</vrf:asNumber>
            <vrf:groupName>ebgp</vrf:groupName>
            <vrf:bgpType>external</vrf:bgpType>
            <vrf:neighbors>
              <vrf:neighbor>
                <vrf:neighborIp>1.1.1.1</vrf:neighborIp>
                <vrf:remoteAs>1111</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.2</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.3</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.4</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.5</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.6</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.7</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.8</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.9</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.10</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.21</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.22</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.23</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.24</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
              <vrf:neighbor>
                <vrf:neighborIp>2.2.2.25</vrf:neighborIp>
                <vrf:remoteAs>2222</vrf:remoteAs>
              </vrf:neighbor>
            </vrf:neighbors>
          </vrf:bgp>
        </vrf:bgps>
      </GetResponseVRF:GetResponseVRF>
    </MOAttributes>
  </GetResponse>
</S:Body>
```



```

        </vrf:neighbor>
      </vrf:neighbors>
    </vrf:bgp>
  </vrf:bgps>
  <vrf:interfaces>
    <vrf:interface>
      <vrf:interfaceType>em</vrf:interfaceType>
      <vrf:interfaceNumber>1</vrf:interfaceNumber>
    </vrf:interface>
    <vrf:interface>
      <vrf:interfaceType>em</vrf:interfaceType>
      <vrf:interfaceNumber>2</vrf:interfaceNumber>
    </vrf:interface>
    <vrf:interface>
      <vrf:interfaceType>em</vrf:interfaceType>
      <vrf:interfaceNumber>3</vrf:interfaceNumber>
    </vrf:interface>
    <vrf:interface>
      <vrf:interfaceType>em</vrf:interfaceType>
      <vrf:interfaceNumber>4</vrf:interfaceNumber>
    </vrf:interface>
  </vrf:interfaces>
</GetResponseVRF:GetResponseVRF>
</MOAttributes>
</GetResponse>
</S:Body>
</S:Envelope>

```

Example 20 *Get VRF*

Set Example

The following example shows how to update a VRF routing instance called “vrf1”.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:vrf="http://schemas.ericsson.com/scm/VRF/" xmlns:typ="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>c074cc6edfc647af96dd6181c048f182</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>VRF@http://schemas.ericsson.com/scm/VRF/</cai3:MOType>
      <cai3:MOId>
        <vrf:vrfName>vrf1</vrf:vrfName>
        <vrf:deviceId>Device1</vrf:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <vrf:SetVRF vrfName="vrf1">
          <vrf:vrfName vrf1</vrf:vrfName>
          <vrf:rd>100:2</vrf:rd>
          <vrf:vrfTarget>100:2</vrf:vrfTarget>
          <vrf:bgps>
            <vrf:bgp>
              <vrf:asNumber>9999</vrf:asNumber>
              <vrf:groupName>ebgp</vrf:groupName>
              <vrf:bgpType>external</vrf:bgpType>
              <vrf:neighbors>
                <vrf:neighbor>
                  <vrf:neighborIp>3.1.1.1</vrf:neighborIp>
                  <vrf:remoteAs>1337</vrf:remoteAs>
                </vrf:neighbor>
              </vrf:neighbors>
              <vrf:redistributes>
                <vrf:redistribute>
                  <vrf:policyName>send-direct</vrf:policyName>
                  <vrf:policyType>export</vrf:policyType>
                </vrf:redistribute>
              </vrf:redistributes>
            </vrf:bgp>
          </vrf:bgps>
          <vrf:interfaces>
            <vrf:interface>
              <vrf:interfaceType>em</vrf:interfaceType>
              <vrf:interfaceNumber>5</vrf:interfaceNumber>
            </vrf:interface>
          </vrf:interfaces>
        </vrf:SetVRF>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c074cc6edfc647af96dd6181c048f182</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 21 Set VRF

Delete Example

The following example shows how to delete a VRF routing instance called "vrf1".



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:vrf="http://schemas.
ericsson.com/scm/VRF/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>c074cc6edfc647af96dd6181c048f182</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>VRF@http://schemas.ericsson.com/scm/VRF/</cai3:MOType>
      <cai3:MOId>
        <vrf:vrfName>vrf1</vrf:vrfName>
        <vrf:deviceId>Device1</vrf:deviceId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c074cc6edfc647af96dd6181c048f182</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <vrf:vrfName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/" xmlns:vrf="http://schemas.
ericsson.com/scm/VRF/">vrf1</vrf:vrfName>
        <vrf:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/" xmlns:vrf="http://schemas.
ericsson.com/scm/VRF/">Device1</vrf:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 22 Delete VRF





7 Bridge Domain

This section covers the MO Bridge Domain.

Bridge domain is a logical interface that allows bidirectional flow of traffic between a Layer 2 bridged network and a Layer 3 routed network traffic.

MOType

BridgeDomain@http://schemas.ericsson.com/scm/BridgeDomain/

7.1 Request Data

7.1.1 Parameters

MOld

Table 12 Bridge Domain MOld

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|--|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| vlanId | Case Sensitive String | Mandatory | Unique id for a VLAN. A VLAN is a switched network that is logically segmented by function, project team, or application, without regard to the physical locations of the users. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in Bridge Domain operations.

Table 13 Bridge Domain Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|-----------------|---------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| interfaceType | interfaceType | O | N/A | O | N/A | Represents type of Ethernet interface that will be configured as member of bridge domain, using member command. Member command binds the bridge domain to the service instance. |
| interfaceNumber | stringType | O | N/A | O | N/A | Represents interface number of Ethernet interface. |

**Table 13** *Bridge Domain Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|-------------------|------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| subInterface | stringType | O | N/A | O | N/A | Represents sub interface of Ethernet interface. |
| vniNumber | stringType | O | N/A | O | N/A | Creates a Virtual Network Identifier (VNI) member or a range of VNI members. |
| networkId | networkId | O | N/A | O | N/A | Network address of Bridge Domain Interface (BDI). |
| multicastGroup | stringType | O | N/A | O | N/A | Represents multicast group IP address. multicastGroup together with vniNumber is used to create a VNI member or a range of VNI members. |
| serviceInstanceId | stringType | O | N/A | O | N/A | Integer from 1 to 4294967295 that uniquely identifies a service instance on an interface. |

7.2 Examples

Create Example

Creates a Bridge Domain and maps VLAN 200 to the Bridge Domain.



```

Create Request:
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:brid="http://schemas.
  ericsson.com/scm/BridgeDomain/">
  <soapenv:Header>
    <cai3:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>BridgeDomain@http://schemas.ericsson.com/scm/
        BridgeDomain/</cai3:MOType>
      <cai3:MOId>
        <brid:vlanId>200</brid:vlanId>
        <brid:deviceId>Device1</brid:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <brid>CreateBridgeDomain vlanId="200">
          <brid:vlanId>200</brid:vlanId>
          <brid:interfaceType>GigabitEthernet</brid:interfaceType>
          <brid:interfaceNumber>1</brid:interfaceNumber>
          <brid:vniNumber>4096</brid:vniNumber>
          <brid:networkId>
            <brid:ipAddress>10.0.0.5</brid:ipAddress>
            <brid:netmask>255.255.255.0</brid:netmask>
          </brid:networkId>
          <brid:serviceInstanceId>5</brid:serviceInstanceId>
        </brid>CreateBridgeDomain>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>

```

Create Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
  "http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <brid:vlanId xmlns:brid="http://schemas.ericsson.com/scm/BridgeDomain/"
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:soapenv=
            "http://schemas.xmlsoap.org/soap/envelope/">200</brid:vlanId>
        <brid:deviceId xmlns:brid="http://schemas.ericsson.com/scm/BridgeDomain/"
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:soapenv=
            "http://schemas.xmlsoap.org/soap/envelope/">Device1</brid:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>

```

Example 23 Create Bridge Domain

Get Example

Get the Bridge Domain that is mapped with VLAN 200.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:brid="http://schemas.
ericsson.com/scm/BridgeDomain/">
  <soapenv:Header>
    <cai3:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>BridgeDomain@http://schemas.ericsson.com/scm/BridgeDomain/
    </cai3:MOType>
      <cai3:MOId>
        <brid:vlanId>200</brid:vlanId>
        <brid:deviceId>Device1</brid:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseBridgeDomain:GetResponseBridgeDomain xmlns="http://
schemas.ericsson.com/scm/BridgeDomain/" xmlns:GetResponseBridgeDomain=
"http://schemas.ericsson.com/scm/BridgeDomain/" xmlns:brid="http://
schemas.ericsson.com/scm/BridgeDomain/" xmlns:cai3="http://schemas.
ericsson.com/cai3g1.2/" xmlns:soapenv="http://schemas.xmlsoap.org/
soap/envelope/">
          <bd:vlanId xmlns:bd="http://schemas.ericsson.com/scm/
BridgeDomain/">200</bd:vlanId>
          <bd:interfaceType xmlns:bd="http://schemas.ericsson.com/scm/
BridgeDomain/">vni</bd:interfaceType>
          <bd:interfaceNumber xmlns:bd="http://schemas.ericsson.com/scm/
BridgeDomain/">4096</bd:interfaceNumber>
          <bd:networkId xmlns:bd="http://schemas.ericsson.com/scm/BridgeDomain/">
            <bd:ipAddress>10.0.0.5</bd:ipAddress>
            <bd:netmask>255.255.255.0</bd:netmask>
          </bd:networkId>
        </GetResponseBridgeDomain:GetResponseBridgeDomain>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 24 Get Bridge Domain

Set Example

Update Bridge Domain that is mapped with VLAN 200.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:brid="http://
schemas.ericsson.com/scm/BridgeDomain/">
  <soapenv:Header>
    <cai3:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>BridgeDomain@http://schemas.ericsson.com/scm/BridgeDomain/
</cai3:MOType>
      <cai3:MOId>
        <brid:vlanId>200</brid:vlanId>
        <brid:deviceId>Device1</brid:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <brid:SetBridgeDomain vlanId="200">
          <brid:vlanId>200</brid:vlanId>
          <brid:interfaceType>GigabitEthernet</brid:interfaceType>
          <brid:interfaceNumber>1</brid:interfaceNumber>
          <brid:vniNumber>4096</brid:vniNumber>
          <brid:networkId>
            <brid:ipAddress>10.0.0.5</brid:ipAddress>
            <brid:netmask>255.255.255.0</brid:netmask>
          </brid:networkId>
          <brid:serviceInstanceId>4</brid:serviceInstanceId>
        </brid:SetBridgeDomain>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

Example 25 Set Bridge Domain

Delete Example

Delete Bridge Domain that is mapped with VLAN 200.



Delete request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:brid="http://
schemas.ericsson.com/scm/BridgeDomain/">
  <soapenv:Header>
    <cai3:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>BridgeDomain@http://schemas.ericsson.com/scm/BridgeDomain/
    </cai3:MOType>
      <cai3:MOId>
        <brid:vlanId>200</brid:vlanId>
        <brid:deviceId>Device1</brid:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
      <MOId>
        <brid:vlanId xmlns:brid="http://schemas.ericsson.com/scm/BridgeDomain/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">200</brid:vlanId>
        <brid:deviceId xmlns:brid="http://schemas.ericsson.com/scm/BridgeDomain/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">Device1</brid:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 26 Delete Bridge Domain

8 EVC Bridge

This section covers the MO `EvcBridge`.

MOType

`EvcBridge@http://schemas.ericsson.com/scm/EvcBridge/`

8.1 Request Data

8.1.1 Parameters

MOLd

Table 14 *EvcBridge MOLd*

| Parameter | Type | Occurrence | Description |
|--------------------------------|-----------------------|------------|---|
| <code>deviceId</code> | Case Sensitive String | Mandatory | Master identifier of the device. |
| <code>groupName</code> | stringType | Mandatory | Represents the name of a bridge group. |
| <code>serviceInstanceId</code> | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in `EvcBridge` operations.

Table 15 *EvcBridge Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|------------------------------|---------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| <code>groupName</code> | stringType | M | N/A | M | N/A | Represents the name of a bridge group. |
| <code>domainName</code> | stringType | M | N/A | M | N/A | Represents the name of a bridge domain. |
| <code>interfaces</code> | complex | O | N/A | O | N/A | Represents the interfaces included within the bridge domain. Forwarding and receiving of packets among the interfaces in same bridge domain are allowed. |
| <code>interface</code> | complex | M | N/A | M | N/A | |
| <code>interfaceType</code> | stringType | M | N/A | M | N/A | Represents type of the interface. For example, Gigabit Ethernet. |
| <code>interfaceNumber</code> | interfaceNumberType | M | N/A | M | N/A | Represents the rack/slot/instance/port of the interface, for example 0/0/0/1. |

**Table 15** *EvcBridge Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|------------|--------------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| vfiName | stringType | O | N/A | O | N/A | Represents the name of a Virtual Forwarding Interface (VFI). |
| neighbors | complex | O | N/A | O | N/A | |
| neighbor | complex | O | N/A | O | N/A | Adds a pseudowire to a bridge VFI. |
| neighborIp | ipAddressType | O | N/A | O | N/A | Specifies IP address of the neighboring router. |
| pwId | ipAddressTypeOrDigitType | O | N/A | O | N/A | Represents the pseudowire ID. |
| pwClass | stringType | O | N/A | O | N/A | Represents the template name of a pseudowire class. |

8.2 Examples

Create Example

The following example shows how to create a EVC bridge configuration.



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/">
  <soapenv:Header>
    <cai3:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>EvcBridge@http://schemas.ericsson.com/scm/EvcBridge/</cai3:MOType>
      <cai3:MOId>
        <evc:groupName>group1</evc:groupName>
        <evc:deviceId>Device1</evc:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <evc:CreateEvcBridge groupName="group1">
          <evc:groupName>group1</evc:groupName>
          <evc:domainName>domain</evc:domainName>
          <evc:interfaces>
            <evc:interface>
              <evc:interfaceType>gi</evc:interfaceType>
              <evc:interfaceNumber>0/0/0/1.1</evc:interfaceNumber>
            </evc:interface>
            <evc:interface>
              <evc:interfaceType>gi</evc:interfaceType>
              <evc:interfaceNumber>0/0/0/1.2</evc:interfaceNumber>
            </evc:interface>
          </evc:interfaces>
          <evc:vfiName>vfi1</evc:vfiName>
          <evc:neighbors>
            <evc:neighbor>
              <evc:neighborIp>10.1.1.1</evc:neighborIp>
              <evc:pwId>12345</evc:pwId>
            </evc:neighbor>
            <evc:neighbor>
              <evc:neighborIp>10.2.2.2</evc:neighborIp>
              <evc:pwId>54321</evc:pwId>
            </evc:neighbor>
          </evc:neighbors>
          <evc:pwClass>mpls</evc:pwClass>
        </evc:CreateEvcBridge>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <evc:groupName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">group1</evc:groupName>
        <evc:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</evc:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 27 Create a EVC Bridge Configuration



Get Example

The following example shows how to get a EVC bridge configuration.

Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/">
  <soapenv:Header>
    <cai3:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>EvcBridge@http://schemas.ericsson.com/scm/EvcBridge/</cai3:MOType>
      <cai3:MOId>
        <evc:groupName>group1</evc:groupName>
        <evc:deviceId>Device1</evc:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseEvcBridge:GetResponseEvcBridge
          xmlns="http://schemas.ericsson.com/scm/EvcBridge/"
          xmlns:GetResponseEvcBridge="http://schemas.ericsson.com/scm/EvcBridge/"
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/"
          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
          <evc:groupName>group1</evc:groupName>
          <evc:domainName>domain</evc:domainName>
          <evc:interfaces>
            <evc:interface>
              <evc:interfaceType>GigabitEthernet</evc:interfaceType>
              <evc:interfaceNumber>0/0/0/1.3</evc:interfaceNumber>
            </evc:interface>
            <evc:interface>
              <evc:interfaceType>GigabitEthernet</evc:interfaceType>
              <evc:interfaceNumber>0/0/0/1.4</evc:interfaceNumber>
            </evc:interface>
          </evc:interfaces>
          <evc:vfiName>newvfi</evc:vfiName>
          <evc:neighbors>
            <evc:neighbor>
              <evc:neighborIp>10.3.3.3</evc:neighborIp>
              <evc:pwId>12345</evc:pwId>
            </evc:neighbor>
            <evc:neighbor>
              <evc:neighborIp>10.4.4.4</evc:neighborIp>
              <evc:pwId>54321</evc:pwId>
            </evc:neighbor>
          </evc:neighbors>
          <evc:pwClass>mpls</evc:pwClass>
        </GetResponseEvcBridge:GetResponseEvcBridge>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 28 Get a EVC Bridge Configuration



Set Example

The following example shows how to update a EVC bridge configuration.

Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
  xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/">
  <soapenv:Header>
    <cai3:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>EvcBridge@http://schemas.ericsson.com/scm/EvcBridge/</cai3:MOType>
      <cai3:MOId>
        <evc:groupName>group1</evc:groupName>
        <evc:deviceId>Device1</evc:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <evc:SetEvcBridge groupName="group1">
          <evc:groupName>group1</evc:groupName>
          <evc:domainName>domain</evc:domainName>
          <evc:interfaces>
            <evc:interface>
              <evc:interfaceType>gi</evc:interfaceType>
              <evc:interfaceNumber>0/0/0/1.3</evc:interfaceNumber>
            </evc:interface>
            <evc:interface>
              <evc:interfaceType>gi</evc:interfaceType>
              <evc:interfaceNumber>0/0/0/1.4</evc:interfaceNumber>
            </evc:interface>
          </evc:interfaces>
          <evc:vfiName>newvfi</evc:vfiName>
          <evc:neighbors>
            <evc:neighbor>
              <evc:neighborIp>10.3.3.3</evc:neighborIp>
              <evc:pwId>12345</evc:pwId>
            </evc:neighbor>
            <evc:neighbor>
              <evc:neighborIp>10.4.4.4</evc:neighborIp>
              <evc:pwId>54321</evc:pwId>
            </evc:neighbor>
          </evc:neighbors>
          <evc:pwClass>mpls</evc:pwClass>
        </evc:SetEvcBridge>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
  </S:Body>
</S:Envelope>
```

Example 29 Set a EVC Bridge Configuration

Delete Example

The following example shows how to delete a EVC bridge configuration.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/">
  <soapenv:Header>
    <cai3:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>EvcBridge@http://schemas.ericsson.com/scm/EvcBridge/</cai3:MOType>
      <cai3:MOId>
        <evc:groupName>group1</evc:groupName>
        <evc:deviceId>Device1</evc:deviceId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <evc:groupName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">group1</evc:groupName>
        <evc:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:evc="http://schemas.ericsson.com/scm/EvcBridge/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</evc:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 30 Delete a EVC Bridge Configuration



9 IPPIM

This section covers the MO Protocol Independent Multicast (PIM).

MOType

IPPIM@http://schemas.ericsson.com/scm/IPPIM/

9.1 Request Data

9.1.1 Parameters

MOId

Table 16 IPPIM MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|--|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| rpAddress | Case Sensitive String | Mandatory | The iP address of rendezvous point in PIM-SM. Rendezvous point acts as meeting place for the source and receiver, which will forward traffic through a shared distribution tree. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in IPPIM operations.

Table 17 IPPIM Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|-----------|------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| pimMode | stringType | M | N/A | M | N/A | Represents PIM mode. To enable PIM on an interface, use the ip pim command in interface configuration mode with pimMode. PimMode can be sparse-mode, dense-mode, sparse-dense-mode or proxy-register. |
| interface | complex | O | N/A | O | N/A | Represents IPInterfaces which needs to enable IP PIM. PIM is enabled by configuring ip pim command on each specified interfaces. |

*Table 17 IPPIM Operation Parameters*

| Node Name | | Data Type | Occurrence | | | | Description |
|-----------|-----------------|---------------|------------|-----|-----|--------|---|
| | | | Create | Get | Set | Delete | |
| | interfaceType | interfaceType | M | N/A | M | N/A | Represents type of the interface. For example, fast Ethernet or Gigabit Ethernet. |
| | interfaceNumber | stringType | M | N/A | M | N/A | Represents the slots/port of the interface. |

9.2 Examples

Create Example

Configuring IP PIM



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ipp="http://
schemas.ericsson.com/scm/IPPIM/">
  <soapenv:Header>
    <cai3:SessionId>5b54206d221a488599ad31061fe399da</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOTYPE>IPPIM@http://schemas.ericsson.com/scm/IPPIM/</cai3:MOTYPE>
      <cai3:MOId>
        <ipp:rpAddress>1.6.2.216</ipp:rpAddress>
        <ipp:deviceId>Device1</ipp:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ipp:CreateIPPIM rpAddress="1.6.2.216">
          <ipp:rpAddress>1.6.2.216</ipp:rpAddress>
          <ipp:pimMode>sparse-dense</ipp:pimMode>
          <ipp:interface>
            <ipp:interfaceType>ge</ipp:interfaceType>
            <ipp:interfaceNumber>-0/0/45.0</ipp:interfaceNumber>
          </ipp:interface>
        </ipp:CreateIPPIM>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>5b54206d221a488599ad31061fe399da</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <ipp:rpAddress xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ipp="http://schemas.ericsson.com/scm/IPPIM/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">1.6.2.216</ipp:rpAddress>
        <ipp:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ipp="http://schemas.ericsson.com/scm/IPPIM/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">Device1</ipp:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 31 Create IP PIM

Get Example

Get the PIM configuration.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ipp="http://
schemas.ericsson.com/scm/IPPIM/">
  <soapenv:Header>
    <cai3:SessionId>5b54206d221a488599ad31061fe399da</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>IPPIM@http://schemas.ericsson.com/scm/IPPIM/</cai3:MOType>
      <cai3:MOId>
        <ipp:rpAddress>1.6.2.216</ipp:rpAddress>
        <ipp:deviceId>Device1</ipp:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>5b54206d221a488599ad31061fe399da</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseIPPIM:GetResponseIPPIM xmlns="http://schemas.ericsson.com/
scm/IPPIM/" xmlns:GetResponseIPPIM="http://schemas.ericsson.com/scm/IPPIM/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ipp="http://
schemas.ericsson.com/scm/IPPIM/" xmlns:soapenv="http://
schemas.xmlsoap.org/soap/envelope/">
          <pim:rpAddress xmlns:pim="http://schemas.ericsson.com/scm/IPPIM/">
1.6.2.216</pim:rpAddress>
          <pim:pimMode xmlns:pim="http://schemas.ericsson.com/scm/IPPIM/">
sparse-dense</pim:pimMode>
          <pim:interface xmlns:pim="http://schemas.ericsson.com/scm/IPPIM/">
            <pim:interfaceType>ge-</pim:interfaceType>
            <pim:interfaceNumber>0/0/45</pim:interfaceNumber>
          </pim:interface>
        </GetResponseIPPIM:GetResponseIPPIM>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 32 Get IP PIM

Set Example

Update PIM sparse mode and RP Static IP addresses.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ipp="http://
schemas.ericsson.com/scm/IPPIM/">
  <soapenv:Header>
    <cai3:SessionId>5b54206d221a488599ad31061fe399da</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>IPPIM@http://schemas.ericsson.com/scm/IPPIM/</cai3:MOType>
      <cai3:MOId>
        <ipp:rpAddress>1.6.2.216</ipp:rpAddress>
        <ipp:deviceId>Device1</ipp:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ipp:SetIPPIM rpAddress="1.6.2.216">
          <ipp:rpAddress>1.6.2.216</ipp:rpAddress>
          <ipp:pimMode>sparse</ipp:pimMode>
          <ipp:interface>
            <ipp:interfaceType>ge</ipp:interfaceType>
            <ipp:interfaceNumber>-0/0/45.0</ipp:interfaceNumber>
          </ipp:interface>
        </ipp:SetIPPIM>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>5b54206d221a488599ad31061fe399da</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
</S:Envelope>
```

Example 33 Set IP PIM

Delete Example

Delete IP PIM configuration



Delete request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:ipp="http://
schemas.ericsson.com/scm/IPPIM/">
  <soapenv:Header>
    <cai3:SessionId>5b54206d221a488599ad31061fe399da</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>IPPIM@http://schemas.ericsson.com/scm/IPPIM/</cai3:MOType>
      <cai3:MOId>
        <ipp:rpAddress>1.6.2.216</ipp:rpAddress>
        <ipp:deviceId>Device1</ipp:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>5b54206d221a488599ad31061fe399da</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
      <MOId>
        <ipp:rpAddress xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:ipp="http://schemas.ericsson.com/scm/IPPIM/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">1.6.2.216</ipp:rpAddress>
        <ipp:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:ipp="http://schemas.ericsson.com/scm/IPPIM/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">Device1</ipp:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 34 Delete IP PIM



10 VPLS

This section covers the MO Virtual Private LAN Service (VPLS).

MOType

VPLS@http://schemas.ericsson.com/scm/VPLS/

10.1 Request Data

10.1.1 Parameters

MOId

Table 18 VPLS MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|---|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| bridgeGroupName | stringType | Mandatory | Represents the name of a bridge group. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in VPLS operations.

Table 19 VPLS Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|--------------------------------|--------------------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| bridgeGroupName | stringType | M | N/A | M | N/A | Represents the name of a bridge group. |
| bridgeDomainName | stringType | M | N/A | M | N/A | Represents the name of a bridge domain. |
| virtualForwardingInterfaceName | stringType | M | N/A | M | N/A | Represents the name of a virtual forwarding interface. |
| vFINeighbors | complex | O | N/A | O | N/A | Adds a pseudowire to a bridge virtual forwarding interface. |
| neighborIp | ipAddressType | M | N/A | M | N/A | Specifies IP address of the neighboring router. |
| pseudowireId | ipAddressTypeOrDigitType | M | N/A | M | N/A | Represents the pseudowire ID. |

**Table 19** VPLS Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|------------------------|---------------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| bridgeDomainInterfaces | complex | O | N/A | O | N/A | Represents the interfaces that should be included within the bridge domain that allows forwarding and receiving of packets from other interfaces that are part of the same bridge domain. |
| bDInterfaceType | stringType | O | N/A | O | N/A | Specifies the type of interface to be configured, for example Gigabit Ethernet. |
| bDInterfaceNumber | interfaceNumberType | O | N/A | O | N/A | Represents the rack/slot/instance/port of the interface, for example, 0/0/0/1. |
| splitHorizonInterfaces | complex | O | N/A | O | N/A | Represents the pseudowire ID |
| sHInterfaceType | stringType | O | N/A | O | N/A | Specifies the type of interface to be configured, for example Gigabit Ethernet. |
| sHInterfaceNumber | interfaceNumberType | O | N/A | O | N/A | Represents the rack/slot/instance/port of the interface, for example, 0/0/0/1. |

10.2 Examples

Create Example

The following example shows how to create a VPLS service.



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">
  <soapenv:Header>
    <cai3:SessionId>1658270bb3404b85aa9c414a769409ca</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>VPLS@http://schemas.ericsson.com/scm/VPLS/</cai3:MOType>
      <cai3:MOId>
        <vpls:bridgeGroupName>provider_x</vpls:bridgeGroupName>
        <vpls:deviceId>Device1</vpls:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <vpls:CreateVPLS bridgeGroupName="provider_x">
          <vpls:bridgeGroupName>provider_x</vpls:bridgeGroupName>
          <vpls:bridgeDomainName>PE1_VPLS</vpls:bridgeDomainName>
          <vpls:virtualForwardingInterfaceName>vf1</vpls:virtualForwardingInterfaceName>
          <vpls:vFINeighbors>
            <vpls:neighborIp>10.1.1.1</vpls:neighborIp>
            <vpls:pseudowireId>12345</vpls:pseudowireId>
          </vpls:vFINeighbors>
          <vpls:vFINeighbors>
            <vpls:neighborIp>10.2.2.2</vpls:neighborIp>
            <vpls:pseudowireId>54321</vpls:pseudowireId>
          </vpls:vFINeighbors>
          <vpls:bridgeDomainInterfaces>
            <vpls:bDInterfaceType>GigabitEthernet</vpls:bDInterfaceType>
            <vpls:bDInterfaceNumber>0/0/0/1</vpls:bDInterfaceNumber>
          </vpls:bridgeDomainInterfaces>
          <vpls:bridgeDomainInterfaces>
            <vpls:bDInterfaceType>GigabitEthernet</vpls:bDInterfaceType>
            <vpls:bDInterfaceNumber>0/0/0/2</vpls:bDInterfaceNumber>
          </vpls:bridgeDomainInterfaces>
          <vpls:splitHorizonInterfaces>
            <vpls:sHInterfaceType></vpls:sHInterfaceType>
            <vpls:sHInterfaceNumber></vpls:sHInterfaceNumber>
          </vpls:splitHorizonInterfaces>
        </vpls:CreateVPLS>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>1658270bb3404b85aa9c414a769409ca</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <vpls:bridgeGroupName
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">provider_x</vpls:bridgeGroup
        <vpls:deviceId
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">Device1</vpls:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 35 Create a VPLS Service



Get Example

The following example shows how to get a VPLS configuration.

Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">
  <soapenv:Header>
    <cai3:SessionId>1658270bb3404b85aa9c414a769409ca</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>VPLS@http://schemas.ericsson.com/scm/VPLS/</cai3:MOType>
      <cai3:MOId>
        <vpls:bridgeGroupName>provider_x</vpls:bridgeGroupName>
        <vpls:deviceId>Device1</vpls:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>1658270bb3404b85aa9c414a769409ca</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseVPLS:GetResponseVPLS
xmlns="http://schemas.ericsson.com/scm/VPLS/"
xmlns:GetResponseVPLS="http://schemas.ericsson.com/scm/VPLS/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">
          <vpls:bridgeGroupName>provider_x</vpls:bridgeGroupName>
          <vpls:bridgeDomainName>PE1_VPLS</vpls:bridgeDomainName>
          <vpls:virtualForwardingInterfaceName>vf1</vpls:virtualForwardingInterfaceName>
          <vpls:vFINeighbors>
            <vpls:neighborIp>10.1.1.1</vpls:neighborIp>
            <vpls:pseudowireId>12345</vpls:pseudowireId>
          </vpls:vFINeighbors>
          <vpls:vFINeighbors>
            <vpls:neighborIp>10.2.2.2</vpls:neighborIp>
            <vpls:pseudowireId>54321</vpls:pseudowireId>
          </vpls:vFINeighbors>
          <vpls:bridgeDomainInterfaces>
            <vpls:bDInterfaceType>GigabitEthernet</vpls:bDInterfaceType>
            <vpls:bDInterfaceNumber>0/0/0/1</vpls:bDInterfaceNumber>
          </vpls:bridgeDomainInterfaces>
          <vpls:bridgeDomainInterfaces>
            <vpls:bDInterfaceType>GigabitEthernet</vpls:bDInterfaceType>
            <vpls:bDInterfaceNumber>0/0/0/2</vpls:bDInterfaceNumber>
          </vpls:bridgeDomainInterfaces>
        </GetResponseVPLS:GetResponseVPLS>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 36 Get a VPLS Configuration

Set Example

The following example shows how to update a VPLS configuration.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">
  <soapenv:Header>
    <cai3:SessionId>1658270bb3404b85aa9c414a769409ca</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>VPLS@http://schemas.ericsson.com/scm/VPLS/</cai3:MOType>
      <cai3:MOId>
        <vpls:bridgeGroupName>provider_x</vpls:bridgeGroupName>
        <vpls:deviceId>Device1</vpls:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <vpls:SetVPLS bridgeGroupName="provider_x">
          <vpls:bridgeGroupName>provider_x</vpls:bridgeGroupName>
          <vpls:bridgeDomainName>bd_new</vpls:bridgeDomainName>
          <vpls:virtualForwardingInterfaceName>vfi2</vpls:virtualForwardingInterfaceName>
          <vpls:vFINeighbors>
            <vpls:neighborIp>10.3.3.3</vpls:neighborIp>
            <vpls:pseudowireId>32415</vpls:pseudowireId>
          </vpls:vFINeighbors>
          <vpls:bridgeDomainInterfaces>
            <vpls:bDInterfaceType>GigabitEthernet</vpls:bDInterfaceType>
            <vpls:bDInterfaceNumber>0/0/0/3</vpls:bDInterfaceNumber>
          </vpls:bridgeDomainInterfaces>
          <vpls:splitHorizonInterfaces>
            <vpls:sHInterfaceType></vpls:sHInterfaceType>
            <vpls:sHInterfaceNumber></vpls:sHInterfaceNumber>
          </vpls:splitHorizonInterfaces>
        </vpls:SetVPLS>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>1658270bb3404b85aa9c414a769409ca</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 37 Set a VPLS Configuration

Delete Example

The following example shows how to delete a VPLS configuration.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">
  <soapenv:Header>
    <cai3:SessionId>1658270bb3404b85aa9c414a769409ca</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>VPLS@http://schemas.ericsson.com/scm/VPLS/</cai3:MOType>
      <cai3:MOId>
        <vpls:bridgeGroupName>provider_x</vpls:bridgeGroupName>
        <vpls:deviceId>Device1</vpls:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>1658270bb3404b85aa9c414a769409ca</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <vpls:bridgeGroupName
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">provider_x</vpls:bridgeGroupNam
        <vpls:deviceId
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:vpls="http://schemas.ericsson.com/scm/VPLS/">Device1</vpls:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 38 Delete a VPLS Configuration

11 Xconnect

This section covers the cross connection MO `Xconnect`.

MOType

`Xconnect@http://schemas.ericsson.com/scm/Xconnect/`

11.1 Request Data

11.1.1 Parameters

MOId

Table 20 *Xconnect MOId*

| Parameter | Type | Occurrence | Description |
|--------------------------------|-----------------------|------------|---|
| <code>deviceId</code> | Case Sensitive String | Mandatory | Master identifier of the device. |
| <code>groupName</code> | stringType | Mandatory | Represents the name of a group. |
| <code>serviceInstanceId</code> | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in `Xconnect` operations.

Table 21 *Xconnect Operation Parameters*

| Node Name | | Data Type | Occurrence | | | | Description |
|-----------|------------------------------|---------------------|------------|-----|-----|--------|---|
| | | | Create | Get | Set | Delete | |
| | <code>groupName</code> | stringType | M | N/A | M | N/A | Represents the name of a group. |
| | <code>xconnectName</code> | stringType | M | N/A | M | N/A | Represents the name of the point-to-point cross connection. |
| | <code>interfaces</code> | complex | O | N/A | O | N/A | Represents the interfaces that should be included within the cross connection. |
| | <code>interface</code> | complex | O | N/A | O | N/A | |
| | <code>interfaceType</code> | stringType | M | N/A | M | N/A | Represents type of the interface. For example, fast Ethernet or Gigabit Ethernet. |
| | <code>interfaceNumber</code> | interfaceNumberType | M | N/A | M | N/A | Represents the rack/slot/instance/port of the interface, for example 0/0/0/1. |

*Table 21 Xconnect Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|------------|--------------------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| neighborIp | ipAddressType | O | N/A | O | N/A | Specifies IP address of the neighboring router. |
| pwId | ipAddressTypeOrDigitType | O | N/A | O | N/A | Represents the pseudowire ID. |
| pwClass | stringType | O | N/A | O | N/A | Represents the template name of a pseudowire class. |

11.2 Examples

Create Example

The following example shows how to create a cross connection configuration.



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">
  <soapenv:Header>
    <cai3:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Xconnect@http://schemas.ericsson.com/scm/Xconnect/</cai3:MOType>
      <cai3:MOId>
        <xcon:groupName>vpws</xcon:groupName>
        <xcon:deviceId>Device1</xcon:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <xcon:CreateXconnect groupName="vpws">
          <xcon:groupName>vpws</xcon:groupName>
          <xcon:xconnectName>xcon</xcon:xconnectName>
          <xcon:interfaces>
            <xcon:interface>
              <xcon:interfaceType>gi</xcon:interfaceType>
              <xcon:interfaceNumber>0/0/0/1</xcon:interfaceNumber>
            </xcon:interface>
            <xcon:interface>
              <xcon:interfaceType>gi</xcon:interfaceType>
              <xcon:interfaceNumber>0/0/0/2</xcon:interfaceNumber>
            </xcon:interface>
          </xcon:interfaces>
          <xcon:neighborIp></xcon:neighborIp>
          <xcon:pwId></xcon:pwId>
          <xcon:pwClass></xcon:pwClass>
        </xcon:CreateXconnect>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <xcon:groupName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">vpws</xcon:groupName>
        <xcon:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">Device1</xcon:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 39 Create a Cross Connection Configuration

Get Example

The following example shows how to get a cross connection configuration.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">
  <soapenv:Header>
    <cai3:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>Xconnect@http://schemas.ericsson.com/scm/Xconnect/</cai3:MOType>
      <cai3:MOId>
        <xcon:groupName>vpws</xcon:groupName>
        <xcon:deviceId>Device1</xcon:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseXconnect:GetResponseXconnect
xmlns="http://schemas.ericsson.com/scm/Xconnect/"
xmlns:GetResponseXconnect="http://schemas.ericsson.com/scm/Xconnect/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">
          <xcon:groupName>vpws</xcon:groupName>
          <xcon:xconnectName>newxcon</xcon:xconnectName>
          <xcon:interfaces>
            <xcon:interface>
              <xcon:interfaceType>GigabitEthernet</xcon:interfaceType>
              <xcon:interfaceNumber>0/0/0/3</xcon:interfaceNumber>
            </xcon:interface>
          </xcon:interfaces>
          <xcon:neighborIp>10.1.1.1</xcon:neighborIp>
          <xcon:pwId>12345</xcon:pwId>
          <xcon:pwClass>encmpls</xcon:pwClass>
        </GetResponseXconnect:GetResponseXconnect>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 40 Get a Cross Connection Configuration

Set Example

The following example shows how to update a cross connection configuration.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">
  <soapenv:Header>
    <cai3:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Xconnect@http://schemas.ericsson.com/scm/Xconnect/</cai3:MOType>
      <cai3:MOId>
        <xcon:groupName>vpws</xcon:groupName>
        <xcon:deviceId>Device1</xcon:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <xcon:SetXconnect groupName="vpws">
          <xcon:groupName>vpws</xcon:groupName>
          <xcon:xconnectName>newxcon</xcon:xconnectName>
          <xcon:interfaces>
            <xcon:interface>
              <xcon:interfaceType>gi</xcon:interfaceType>
              <xcon:interfaceNumber>0/0/0/3</xcon:interfaceNumber>
            </xcon:interface>
          </xcon:interfaces>
          <xcon:neighborIp>10.1.1.1</xcon:neighborIp>
          <xcon:pwId>12345</xcon:pwId>
          <xcon:pwClass>encpmppls</xcon:pwClass>
        </xcon:SetXconnect>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 41 Set a Cross Connection Configuration**Delete Example**

The following example shows how to delete a cross connection configuration.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">
  <soapenv:Header>
    <cai3:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>Xconnect@http://schemas.ericsson.com/scm/Xconnect/</cai3:MOType>
      <cai3:MOId>
        <xcon:groupName>vpws</xcon:groupName>
        <xcon:deviceId>Device1</xcon:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
      <MOId>
        <xcon:groupName xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">vpws</xcon:groupName>
        <xcon:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xcon="http://schemas.ericsson.com/scm/Xconnect/">Device1</xcon:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 42 Delete a Cross Connection Configuration



12 Ethernet Interface

This section covers the MO Ethernet Interface.

MOType

EthernetInterface@http://schemas.ericsson.com/scm/EthernetInterface/

12.1 Request Data

12.1.1 Parameters

MOId

Table 22 Ethernet Interface MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|--|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| interfaceType | stringType | Mandatory | Represents type of the Ethernet interface. For example, fast Ethernet or Gigabit Ethernet. |
| interfaceNumber | interfaceNumberType | Mandatory | Represents the slots/port of the interface. For example , 0/1. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in Ethernet Interface operations.

Table 23 Ethernet Interface Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|-----------------|---------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| interfaceType | stringType | M | N/A | M | N/A | Represents type of the Ethernet interface. For example, fast Ethernet or Gigabit Ethernet. |
| interfaceNumber | interfaceNumberType | M | N/A | M | N/A | Represents the slots/port of the interface. For example , 0/1. |
| l2transport | l2transportType | O | N/A | O | N/A | Sets the interface into Layer 2-transport-mode. The only valid value is "l2transport". |

**Table 23** *Ethernet Interface Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|-------------------|----------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| serviceInstanceId | ipAddressOrDigitType | O | N/A | O | N/A | Represents the identity of the Ethernet service instance, valid values are 1 to 8000 (included). |
| vlanId | ipAddressOrDigitType | O | N/A | O | N/A | Specifies the vlan to be used to map 802.1Q frames ingress. |
| duplex | duplexType | O | N/A | O | N/A | Sets the duplex mode of the Ethernet port. Duplex can have the following values: auto, full or half. |
| speed | speedType | O | N/A | O | N/A | Configures the speed of the Ethernet interface. Speed can have the following values: 10, 100, 1000, or auto. |
| description | stringType | O | N/A | O | N/A | Specifies the description of the Ethernet interface. |
| networkId | networkId | O | N/A | O | N/A | |
| ipAddress | ipAddressType | M | N/A | M | N/A | Represents IP address of the interface. |
| netmask | ipAddressOrDigitType | M | N/A | M | N/A | Represents netmask of the IP address to be configured in interface. |

12.2 Examples

Create Example

The following example shows how to create an Ethernet interface.



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:eth="http://schemas.
ericsson.com/scm/EthernetInterface/" xmlns:types="http://schemas.ericsson.com/
scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOTYPE>EthernetInterface@http://schemas.ericsson.com/scm/
      EthernetInterface/</cai3:MOTYPE>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:interfaceType>ge</cai3:interfaceType>
        <cai3:interfaceNumber>0/0/45</cai3:interfaceNumber>
      </cai3:MOId>
      <cai3:MOAttributes>
        <eth:CreateEthernetInterface interfaceNumber="0/0/45" interfaceType="ge">
          <eth:interfaceType>ge</eth:interfaceType>
          <eth:interfaceNumber>0/0/45</eth:interfaceNumber>
          <eth:duplex>full</eth:duplex>
          <eth:description>description</eth:description>
        </eth:CreateEthernetInterface>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <cai3:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">Device1</cai3:deviceId>
        <cai3:interfaceType xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">ge</cai3:interfaceType>
        <cai3:interfaceNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">0/0/45</cai3:interfaceNumber>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 43 Create Ethernet Interface

Get Example

The following example shows how to get an Ethernet interface.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:types="http://schemas.ericsson.com/scm/Types/" xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>EthernetInterface@http://schemas.ericsson.com/scm/EthernetInterface/</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:interfaceType>ge</cai3:interfaceType>
        <cai3:interfaceNumber>0/0/45</cai3:interfaceNumber>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseEthernetInterface:GetResponseEthernetInterface xmlns="http://schemas.ericsson.com/scm/EthernetInterface/" xmlns:GetResponseEthernetInterface="http://schemas.ericsson.com/scm/EthernetInterface/" xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types="http://schemas.ericsson.com/scm/Types/">
          <eth:interfaceType>ge</eth:interfaceType>
          <eth:interfaceNumber>0/0/45</eth:interfaceNumber>
          <eth:duplex>full</eth:duplex>
          <eth:description>description</eth:description>
          <eth:networkId>
            <eth:ipAddress>192.168.1.3</eth:ipAddress>
            <eth:netmask>24</eth:netmask>
          </eth:networkId>
        </GetResponseEthernetInterface:GetResponseEthernetInterface>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 44 Get Ethernet Interface

Set Example

The following example shows how to update an Ethernet interface.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:eth="http://schemas.
ericsson.com/scm/EthernetInterface/" xmlns:types="http://schemas.ericsson.com/
scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>EthernetInterface@http://schemas.ericsson.com/scm/
      EthernetInterface/</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:interfaceType>ge</cai3:interfaceType>
        <cai3:interfaceNumber>0/0/45</cai3:interfaceNumber>
      </cai3:MOId>
      <cai3:MOAttributes>
        <eth:SetEthernetInterface interfaceNumber="0/0/45" interfaceType="ge">
          <eth:interfaceType>ge</eth:interfaceType>
          <eth:interfaceNumber>0/0/45</eth:interfaceNumber>
          <eth:networkId>
            <eth:ipAddress>192.168.1.3</eth:ipAddress>
            <eth:netmask>24</eth:netmask>
          </eth:networkId>
        </eth:SetEthernetInterface>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 45 Set Ethernet Interface**Delete Example**

The following example shows how to delete an ethernet interface.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:types="http://schemas.
ericsson.com/scm/Types/" xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>EthernetInterface@http://schemas.ericsson.com/scm/
EthernetInterface</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:interfaceType>ge</cai3:interfaceType>
        <cai3:interfaceNumber>0/0/45</cai3:interfaceNumber>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <cai3:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">Device1</cai3:deviceId>
        <cai3:interfaceType xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">ge</cai3:interfaceType>
        <cai3:interfaceNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:eth="http://schemas.ericsson.com/scm/EthernetInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">0/0/45</cai3:interfaceNumber>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 46 Delete Ethernet Interface



13 Loopback Interface

This section covers the MO Loopback Interface.

MOType

LoopbackInterface@http://schemas.ericsson.com/scm/LoopbackInterface/

13.1 Request Data

13.1.1 Parameters

MOLd

Table 24 Loopback Interface MOLd

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|---|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| loopbackNumber | interfaceNumberType | Mandatory | Represents interface number of loopback interface. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in Loopback Interface operations.

Table 25 Loopback Interface Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|----------------|----------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| loopbackNumber | interfaceNumberType | M | N/A | M | N/A | Represents interface number of loopback interface. |
| networkId | - | O | N/A | O | N/A | Represents network address of loopback interface. |
| ipAddress | ipAddressType | M | N/A | M | N/A | Represents IP address of the interface. |
| netmask | ipAddressOrDigitType | M | N/A | M | N/A | Represents netmask of the IP address configured in loopback interface. |
| description | stringType | O | N/A | O | N/A | Specifies the description of the Loopback interface. |



13.2 Examples

Create Example

The following example shows how to create a Loopback Interface.

Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:loop="http://schemas.ericsson.com/scm/LoopbackInterface/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>LoopbackInterface@http://schemas.ericsson.com/scm/LoopbackInterface</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:loopbackNumber>0</cai3:loopbackNumber>
      </cai3:MOId>
      <cai3:MOAttributes>
        <loop:CreateLoopbackInterface loopbackNumber="0">
          <loop:loopbackNumber>0</loop:loopbackNumber>
          <loop:networkId>
            <loop:ipAddress>20.0.0.9</loop:ipAddress>
            <loop:netmask>24</loop:netmask>
          </loop:networkId>
          <loop:description>description</loop:description>
        </loop:CreateLoopbackInterface>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <cai3:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:loop="http://schemas.ericsson.com/scm/LoopbackInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</cai3:deviceId>
        <cai3:loopbackNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:loop="http://schemas.ericsson.com/scm/LoopbackInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">0</cai3:loopbackNumber>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 47 Create Loopback Interface

Get Example

The following example shows how to get a loopback interface.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:loop="http://schemas.
ericsson.com/scm/LoopbackInterface/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>LoopbackInterface@http://schemas.ericsson.com/scm/
LoopbackInterface/</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:loopbackNumber>0</cai3:loopbackNumber>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseLoopbackInterface:GetResponseLoopbackInterface xmlns=
"http://schemas.ericsson.com/scm/LoopbackInterface/" xmlns:
GetResponseLoopbackInterface="http://schemas.ericsson.com/scm/
LoopbackInterface/" xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:loop="http://schemas.ericsson.com/scm/LoopbackInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
          <loop:loopbackNumber>0</loop:loopbackNumber>
          <loop:networkId>
            <loop:ipAddress>20.0.0.9</loop:ipAddress>
            <loop:netmask>24</loop:netmask>
          </loop:networkId>
          <loop:description>description</loop:description>
        </GetResponseLoopbackInterface:GetResponseLoopbackInterface>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 48 Get Loopback Interface

Set Example

The following example shows how to update a Loopback Interface.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:loop="http://schemas.
ericsson.com/scm/LoopbackInterface/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>LoopbackInterface@http://schemas.ericsson.com/scm/
      LoopbackInterface</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:loopbackNumber>0</cai3:loopbackNumber>
      </cai3:MOId>
      <cai3:MOAttributes>
        <loop:SetLoopbackInterface loopbackNumber="0">
          <loop:loopbackNumber>0</loop:loopbackNumber>
          <loop:networkId>
            <loop:ipAddress>20.0.0.10</loop:ipAddress>
            <loop:netmask>24</loop:netmask>
          </loop:networkId>
          <loop:description>description</loop:description>
        </loop:SetLoopbackInterface>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

Example 49 Set Loopback Interface

Delete Example

The following example shows how to delete a loopback interface.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:types="http://schemas.
ericsson.com/scm/Types/" xmlns:loop="http://schemas.ericsson.com/scm/LoopbackInterface/">
  <soapenv:Header>
    <cai3:SessionId>67e18c0bbf584cbb9fc5e56a25676483</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>LoopbackInterface@http://schemas.ericsson.com/scm/
      LoopbackInterface/</cai3:MOType>
      <cai3:MOId>
        <cai3:deviceId>Device1</cai3:deviceId>
        <cai3:loopbackNumber>0</cai3:loopbackNumber>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>da4e1408765c4122b1bb3cad6ae497f7</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <cai3:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:loop="http://schemas.ericsson.com/scm/LoopbackInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">Device1</cai3:deviceId>
        <cai3:loopbackNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:loop="http://schemas.ericsson.com/scm/LoopbackInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:types=
"http://schemas.ericsson.com/scm/Types/">0</cai3:loopbackNumber>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 50 Delete a Loopback Interface





14 NVE Interface

This section covers the Network Virtualization Endpoint (NVE) MO `NveInterface`.

MOType

`NveInterface@http://schemas.ericsson.com/scm/NveInterface/`

14.1 Request Data

14.1.1 Parameters

MOId

Table 26 *NveInterface MOId*

| Parameter | Type | Occurrence | Description |
|---------------------------------|-----------------------------------|------------|---|
| <code>deviceId</code> | Case Sensitive String | Mandatory | Master identifier of the device. |
| <code>udpPort</code> | <code>ipAddressOrDigitType</code> | Mandatory | The destination UDP port number of a VLAN. |
| <code>nveInterfaceNumber</code> | <code>interfaceNumberType</code> | Mandatory | Represents the slots/port of the interface. For example, 1. |
| <code>serviceInstanceId</code> | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in `NveInterface` operations.

Table 27 *NveInterface Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|---------------------------------|-----------------------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| <code>udpPort</code> | <code>ipAddressOrDigitType</code> | M | N/A | M | N/A | Specifies the destination UDP port number of a VLAN. |
| <code>nveInterfaceNumber</code> | <code>interfaceNumberType</code> | M | N/A | M | N/A | Represents the NVE interface number, for example, 1. |
| <code>vniNumber</code> | <code>stringType</code> | M | N/A | M | N/A | Represents a VNI member, valid values are 4096 to 16777215 (included). |
| <code>multicastGroup</code> | <code>ipAddressType</code> | M | N/A | M | N/A | Represents the multicast group IPv4 address. |

*Table 27 NveInterface Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|-----------------------|---------------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| sourceInterfaceType | stringType | M | N/A | M | N/A | Represents the source interfaceType, for example, Loopback. |
| sourceInterfaceNumber | interfaceNumberType | M | N/A | M | N/A | Represents the source interfaceNumber, for example, 2 |

14.2 Examples

Create Example

The following example shows how to create an NVE interface configuration.



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/">
  <soapenv:Header>
    <cai3:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>NveInterface@http://schemas.ericsson.com/scm/NveInterface/</cai3:MOType>
      <cai3:MOId>
        <nve:udpPort>2000</nve:udpPort>
        <nve:nveInterfaceNumber>1</nve:nveInterfaceNumber>
        <nve:deviceId>Device1</nve:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <nve:CreateNveInterface nveInterfaceNumber="1" udpPort="2000">
          <nve:udpPort>2000</nve:udpPort>
          <nve:nveInterfaceNumber>1</nve:nveInterfaceNumber>
          <nve:vniNumber>5001</nve:vniNumber>
          <nve:multicastGroup>225.1.1.1</nve:multicastGroup>
          <nve:sourceInterfaceType>loopback</nve:sourceInterfaceType>
          <nve:sourceInterfaceNumber>1</nve:sourceInterfaceNumber>
        </nve:CreateNveInterface>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <nve:udpPort xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">2000</nve:udpPort>
        <nve:nveInterfaceNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">1</nve:nveInterfaceNumber>
        <nve:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</nve:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 51 Create an NVE interface configuration

Get Example

The following example shows how to get an NVE interface configuration.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/">
  <soapenv:Header>
    <cai3:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>NveInterface@http://schemas.ericsson.com/scm/NveInterface/</cai3:MOType>
      <cai3:MOId>
        <nve:udpPort>2000</nve:udpPort>
        <nve:nveInterfaceNumber>1</nve:nveInterfaceNumber>
        <nve:deviceId>Device1</nve:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseNveInterface:GetResponseNveInterface
xmlns="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:GetResponseNveInterface="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
          <nve:udpPort>2000</nve:udpPort>
          <nve:nveInterfaceNumber>1</nve:nveInterfaceNumber>
          <nve:vniNumber>6001</nve:vniNumber>
          <nve:multicastGroup>225.1.1.1</nve:multicastGroup>
          <nve:sourceInterfaceType>Loopback</nve:sourceInterfaceType>
          <nve:sourceInterfaceNumber>2</nve:sourceInterfaceNumber>
        </GetResponseNveInterface:GetResponseNveInterface>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 52 Get an NVE interface Configuration

Set Example

The following example shows how to update an NVE interface configuration.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/">
  <soapenv:Header>
    <cai3:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>NveInterface@http://schemas.ericsson.com/scm/NveInterface/</cai3:MOType>
      <cai3:MOId>
        <nve:udpPort>2000</nve:udpPort>
        <nve:nveInterfaceNumber>1</nve:nveInterfaceNumber>
        <nve:deviceId>Device1</nve:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <nve:SetNveInterface nveInterfaceNumber="1" udpPort="2000">
          <nve:udpPort>2000</nve:udpPort>
          <nve:nveInterfaceNumber>1</nve:nveInterfaceNumber>
          <nve:vniNumber>6001</nve:vniNumber>
          <nve:multicastGroup>225.1.1.1</nve:multicastGroup>
          <nve:sourceInterfaceType>loopback</nve:sourceInterfaceType>
          <nve:sourceInterfaceNumber>2</nve:sourceInterfaceNumber>
        </nve:SetNveInterface>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 53 Set an NVE interface Configuration

Delete Example

The following example shows how to delete an NVE interface configuration.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/">
  <soapenv:Header>
    <cai3:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>NveInterface@http://schemas.ericsson.com/scm/NveInterface/</cai3:MOType>
      <cai3:MOId>
        <nve:udpPort>2000</nve:udpPort>
        <nve:nveInterfaceNumber>1</nve:nveInterfaceNumber>
        <nve:deviceId>Device1</nve:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c5dfe74b0daf4e50973d9ae27729a952</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <nve:udpPort xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">2000</nve:udpPort>
        <nve:nveInterfaceNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">1</nve:nveInterfaceNumber>
        <nve:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:nve="http://schemas.ericsson.com/scm/NveInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</nve:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 54 Delete an NVE interface configuration



15 Serial Interface

This section covers the MO Serial Interface.

MOType

SerialInterface@http://schemas.ericsson.com/scm/SerialInterface/

15.1 Request Data

15.1.1 Parameters

MOId

Table 28 Serial Interface MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|---|
| interfaceNumber | Case Sensitive String | Mandatory | |
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in Serial Interface operations.

Table 29 Serial Interface Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|-----------------|-----------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| interfaceNumber | stringType | M | N/A | M | N/A | Represents interface number of serial interface. |
| encapsulation | stringType | O | N/A | O | N/A | Represents encapsulation type to configure synchronous serial encapsulation. Encapsulation can be, for example, frame-relay, hdlc, or ppc. |
| mtu | ipAddress OrDigitType | O | N/A | O | N/A | Represents Maximum Transmission Unit. Default value is 4470 bytes. |
| description | stringType | O | N/A | O | N/A | Represents description configured in serial interface. |
| clockRate | stringType | O | N/A | O | N/A | Represents clock rate to set the network line speed. |

*Table 29 Serial Interface Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|-----------|------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| vrfName | stringType | O | N/A | O | N/A | Name of virtual routing forwarding instance configured on serial interface. |
| networkId | networkId | O | N/A | O | N/A | Represents network address of serial interface. |

15.2 Examples

Create Example

The following example shows how to create a serial interface.



Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ser="http://
schemas.ericsson.com/scm/SerialInterface/">
  <soapenv:Header>
    <cai3:SessionId>37162d350cb54a3583falbe274ba93ac</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOTYPE>SerialInterface@http://schemas.ericsson.com/scm/
SerialInterface/</cai3:MOTYPE>
      <cai3:MOId>
        <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
        <ser:deviceId>Device1</ser:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ser:CreateSerialInterface interfaceNumber="1/0/0">
          <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
          <ser:encapsulation>ppp</ser:encapsulation>
          <ser:mtu>0</ser:mtu>
          <ser:networkId>
            <ser:ipAddress>10.10.10.10</ser:ipAddress>
            <ser:netmask>24</ser:netmask>
          </ser:networkId>
        </ser:CreateSerialInterface>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>37162d350cb54a3583falbe274ba93ac</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <ser:interfaceNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ser="http://schemas.ericsson.com/scm/SerialInterface/" xmlns:soapenv=
"http://schemas.xmlsoap.org/soap/envelope/">1/0/0</ser:interfaceNumber>
        <ser:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ser=
"http://schemas.ericsson.com/scm/SerialInterface/" xmlns:soapenv="http://
schemas.xmlsoap.org/soap/envelope/">Device1</ser:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 55 Create Serial Interface

Get Example

The following example shows how to get a serial interface.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3g/1.2/">
  <soapenv:Header>
    <cai3:SessionId>37162d350cb54a3583falbe274ba93ac</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>SerialInterface@http://schemas.ericsson.com/scm/SerialInterface</cai3:MOType>
      <cai3:MOId>
        <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
        <ser:deviceId>Device1</ser:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g/1.2/">
  <S:Header>
    <cai3g:SessionId>37162d350cb54a3583falbe274ba93ac</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g/1.2/">
      <MOAttributes>
        <GetResponseSerialInterface:GetResponseSerialInterface xmlns="http://schemas.ericsson.com/scm/SerialInterface">
          <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
          <ser:encapsulation>ppp</ser:encapsulation>
        </GetResponseSerialInterface:GetResponseSerialInterface>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 56 Get serial interface

Set Example

The following example shows how to update a serial interface.



Set Request:

Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:ser="http://
schemas.ericsson.com/scm/SerialInterface/">
  <soapenv:Header>
    <cai3:SessionId>37162d350cb54a3583falbe274ba93ac</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>SerialInterface@http://schemas.ericsson.com/scm/
SerialInterface</cai3:MOType>
      <cai3:MOId>
        <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
        <ser:deviceId>Device1</ser:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ser:SetSerialInterface interfaceNumber="1/0/0">
          <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
          <ser:encapsulation>ppp</ser:encapsulation>
          <ser:mtu>0</ser:mtu>
          <ser:description>description</ser:description>
          <ser:networkId>
            <ser:ipAddress>10.10.10.10</ser:ipAddress>
            <ser:netmask>24</ser:netmask>
          </ser:networkId>
        </ser:SetSerialInterface>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>37162d350cb54a3583falbe274ba93ac</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
  </S:Body>
</S:Envelope>
```

Example 57 Set Serial Interface

Delete Example

The following example shows how to delete a serial interface.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:ser="http://
schemas.ericsson.com/scm/SerialInterface/">
  <soapenv:Header>
    <cai3:SessionId>37162d350cb54a3583falbe274ba93ac</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>SerialInterface@http://schemas.ericsson.com/scm/
      SerialInterface/</cai3:MOType>
      <cai3:MOId>
        <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
        <ser:deviceId>Device1</ser:deviceId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>37162d350cb54a3583falbe274ba93ac</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <ser:interfaceNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ser="http://schemas.ericsson.com/scm/SerialInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">1/0/0</
ser:interfaceNumber>
        <ser:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ser="http://schemas.ericsson.com/scm/SerialInterface/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</
ser:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 58 Delete Serial Interface

16 UNI

This section covers the User-Network Interface (UNI) MO UNI.

MOType

UNI@http://schemas.ericsson.com/scm/UNI/

16.1 Request Data

16.1.1 Parameters

MOId

Table 30 UNI MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|--|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| interfaceType | stringType | Mandatory | Represents type of the Ethernet interface. For example, fast Ethernet or Gigabit Ethernet. |
| interfaceNumber | interfaceNumberType | Mandatory | Represents the slots/port of the interface. For example , 0/1. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in UNI operations.

Table 31 UNI Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|-----------------|----------------------|------------|-----|-----|--------|---|
| | | Create | Get | Set | Delete | |
| interfaceType | stringType | M | N/A | M | N/A | Specifies the type of interface to be configured, Fast Ethernet or Gigabit Ethernet. |
| interfaceNumber | interfaceNumberType | M | N/A | M | N/A | Represents the slot/port of the interface, for example, 0/1. |
| vlanId | ipAddressOrDigitType | M | N/A | M | N/A | Specifies the identity of a VLAN to be used for carrying traffic by a given configured access port. |



16.2 Examples

Create Example

The following example shows how to create a UNI configuration.

Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">
  <soapenv:Header>
    <cai3:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>UNI@http://schemas.ericsson.com/scm/UNI/</cai3:MOType>
      <cai3:MOId>
        <uni:interfaceType>FastEthernet</uni:interfaceType>
        <uni:interfaceNumber>1/0</uni:interfaceNumber>
        <uni:deviceId>Device1</uni:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <uni:CreateUNI interfaceNumber="1/0" interfaceType="FastEthernet">
          <uni:interfaceType>FastEthernet</uni:interfaceType>
          <uni:interfaceNumber>1/0</uni:interfaceNumber>
          <uni:vlanId>2</uni:vlanId>
        </uni:CreateUNI>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <uni:interfaceType
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">FastEthernet</uni:interfaceType>
        <uni:interfaceNumber
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">1/0</uni:interfaceNumber>
        <uni:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">Device1</uni:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 59 Create UNI configuration

Get Example

The following example shows how to get a UNI configuration.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">
  <soapenv:Header>
    <cai3:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>UNI@http://schemas.ericsson.com/scm/UNI/</cai3:MOType>
      <cai3:MOId>
        <uni:interfaceType>FastEthernet</uni:interfaceType>
        <uni:interfaceNumber>1/0</uni:interfaceNumber>
        <uni:deviceId>Device1</uni:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3gl.2/">
  <S:Header>
    <cai3g:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3gl.2/">
      <MOAttributes>
        <GetResponseUNI:GetResponseUNI
xmlns="http://schemas.ericsson.com/scm/UNI/"
xmlns:GetResponseUNI="http://schemas.ericsson.com/scm/UNI/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">
          <uni:interfaceType>FastEthernet</uni:interfaceType>
          <uni:interfaceNumber>1/0</uni:interfaceNumber>
          <uni:vlanId>3</uni:vlanId>
        </GetResponseUNI:GetResponseUNI>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 60 Get a UNI Configuration

Set Example

The following example shows how to update a UNI configuration.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">
  <soapenv:Header>
    <cai3:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>UNI@http://schemas.ericsson.com/scm/UNI/</cai3:MOType>
      <cai3:MOId>
        <uni:interfaceType>FastEthernet</uni:interfaceType>
        <uni:interfaceNumber>1/0</uni:interfaceNumber>
        <uni:deviceId>Device1</uni:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <uni:SetUNI interfaceNumber="1/0" interfaceType="FastEthernet">
          <uni:interfaceType>FastEthernet</uni:interfaceType>
          <uni:interfaceNumber>1/0</uni:interfaceNumber>
          <uni:vlanId>3</uni:vlanId>
        </uni:SetUNI>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 61 Set a UNI Configuration

Delete Example

The following example shows how to delete a UNI configuration.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">
  <soapenv:Header>
    <cai3:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>UNI@http://schemas.ericsson.com/scm/UNI/</cai3:MOType>
      <cai3:MOId>
        <uni:interfaceType>FastEthernet</uni:interfaceType>
        <uni:interfaceNumber>1/0</uni:interfaceNumber>
        <uni:deviceId>Device1</uni:deviceId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <uni:interfaceType xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">FastEthernet</uni:interfaceType>
        <uni:interfaceNumber xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">1/0</uni:interfaceNumber>
        <uni:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:uni="http://schemas.ericsson.com/scm/UNI/">Device1</uni:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 62 Delete a UNI configuration





17 DHCP Server

This section covers the MO `DHCPServer`.

MOType

`DHCPServer@http://schemas.ericsson.com/scm/DHCPServer/`

17.1 Request Data

17.1.1 Parameters

MOId

Table 32 DHCPServer MOId

| Parameter | Type | Occurrence | Description |
|--------------------------------|-----------------------|------------|---|
| <code>deviceId</code> | Case Sensitive String | Mandatory | Master identifier of the device. |
| <code>poolName</code> | stringType | Mandatory | The name of the DHCP address pool. |
| <code>serviceInstanceId</code> | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in `DHCPServer` operations.

Table 33 DHCPServer Operation Parameters

| Node Name | Data Type | Occurrence | | | | Description |
|--------------------------------|----------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| <code>dhcpDatabase</code> | stringType | O | N/A | O | N/A | Represents any host or storage-media on the DHCP Server that stores DHCP bindings. A DHCP database contains the mappings between a client IP address and hardware address, referred to as a binding. |
| <code>excludedAddresses</code> | complex | M | N/A | M | N/A | Specifies the IP addresses that the DHCP server should not assign to DHCP clients. |
| <code>lowAddress</code> | ipAddress Type | M | N/A | M | N/A | Represents lowest IP address that needs to be excluded. |
| <code>highAddress</code> | ipAddress Type | O | N/A | O | N/A | Represents highest IP address that needs to be excluded. |

**Table 33** *DHCPServer Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|-------------------|----------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| poolName | stringType | M | N/A | M | N/A | Represents the name of the DHCP address pool. |
| network | complex | M | N/A | M | N/A | Specifies the subnet network number, and mask of the DHCP address pool. |
| networkAddress | ipAddress Type | M | N/A | M | N/A | Represents the network number of the DHCP pool. |
| netmask | ipAddress Type | M | N/A | M | N/A | Represents the network mask for the DHCP pool. |
| domainName | stringType | M | N/A | M | N/A | Specifies the domain name for the client. |
| domainNameService | ipAddress Type | M | N/A | M | N/A | A list of IP address of the DNS server that is available to a DHCP client. |
| defaultGateway | ipAddress Type | O | N/A | O | N/A | Specifies the IP address of the default router for a DHCP client. |
| leaseTime | stringType | O | N/A | O | N/A | Specifies the duration of the lease. |

17.2 Examples

Create Example

The following example shows how to create a DHCP Server.



Create Request:

```
soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/">
  <soapenv:Header>
    <cai3:SessionId>7f202db2b885445389e13951761b086c</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>DHCPServer@http://schemas.ericsson.com/scm/DHCPServer/
    </cai3:MOType>
      <cai3:MOId>
        <dhc:poolName>poolone</dhc:poolName>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <dhc:CreateDHCPServer poolName="poolone">
          <dhc:poolName>poolone</dhc:poolName>
          <dhc:excludedAddresses>
            <dhc:lowAddress>192.168.0.150</dhc:lowAddress>
            <dhc:highAddress>192.168.0.254</dhc:highAddress>
          </dhc:excludedAddresses>
          <dhc:network>
            <dhc:networkAddress>192.168.0.0</dhc:networkAddress>
            <dhc:netmask>255.255.255.0</dhc:netmask>
          </dhc:network>
          <dhc:domainName>mydomain.local</dhc:domainName>
          <dhc:domainNameService>192.168.0.150</dhc:domainNameService>
          <dhc:domainNameService>192.168.0.151</dhc:domainNameService>
          <dhc:defaultGateway>192.168.0.254</dhc:defaultGateway>
        </dhc:CreateDHCPServer>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>7f202db2b885445389e13951761b086c
  </cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <dhc:poolName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">poolone
        </dhc:poolName>
        <dhc:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1
        </dhc:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 63 Create DHCP Server

Get Example

The following example shows how to get a DHCP Server configuration.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/">
  <soapenv:Header>
    <cai3:SessionId>7f202db2b885445389e13951761b086c</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>DHCPServer@http://schemas.ericsson.com/scm/DHCPServer/
    </cai3:MOType>
      <cai3:MOId>
        <dhc:poolName>poolone</dhc:poolName>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>7f202db2b885445389e13951761b086c</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseDHCPServer:GetResponseDHCPServer
xmlns="http://schemas.ericsson.com/scm/DHCPServer/"
xmlns:GetResponseDHCPServer="http://schemas.ericsson.com/scm/DHCPServer/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
          <dhc:poolName>poolone</dhc:poolName>
          <dhc:dhcpDatabase>172.16.0.1</dhc:dhcpDatabase>
          <dhc:excludedAddresses>
            <dhc:lowAddress>192.16.0.150</dhc:lowAddress>
            <dhc:highAddress>192.168.0.254</dhc:highAddress>
          </dhc:excludedAddresses>
          <dhc:network>
            <dhc:networkAddress>192.168.0.0</dhc:networkAddress>
            <dhc:netmask>255.255.255.0</dhc:netmask>
          </dhc:network>
          <dhc:domainName>mynewdomain.local</dhc:domainName>
          <dhc:domainNameService>192.168.0.153</dhc:domainNameService>
          <dhc:domainNameService>192.168.0.154</dhc:domainNameService>
          <dhc:defaultGateway>192.168.0.254</dhc:defaultGateway>
          <dhc:leaseTime>5</dhc:leaseTime>
        </GetResponseDHCPServer:GetResponseDHCPServer>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 64 Get DHCP Server Configuration

Set Example

The following example shows how to update a DHCP Server configuration.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/">
  <soapenv:Header>
    <cai3:SessionId>7f202db2b885445389e13951761b086c
  </cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>DHCPServer@http://schemas.ericsson.com/scm/DHCPServer/
    </cai3:MOType>
      <cai3:MOId>
        <dhc:poolName>poolone</dhc:poolName>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <dhc:SetDHCPServer poolName="poolone">
          <dhc:poolName>poolone</dhc:poolName>
          <dhc:dhcpDatabase>172.16.0.1</dhc:dhcpDatabase>
          <dhc:excludedAddresses>
            <dhc:lowAddress>192.168.0.150</dhc:lowAddress>
            <dhc:highAddress>192.168.0.254</dhc:highAddress>
          </dhc:excludedAddresses>
          <dhc:network>
            <dhc:networkAddress>192.168.0.0</dhc:networkAddress>
            <dhc:netmask>255.255.255.0</dhc:netmask>
          </dhc:network>
          <dhc:domainName>mynewdomain.local</dhc:domainName>
          <dhc:domainNameService>192.168.0.153</dhc:domainNameService>
          <dhc:domainNameService>192.168.0.154</dhc:domainNameService>
          <dhc:defaultGateway>192.168.0.254</dhc:defaultGateway>
          <dhc:leaseTime>5</dhc:leaseTime>
        </dhc:SetDHCPServer>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>7f202db2b885445389e13951761b086c
  </cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

Example 65 Set DHCP Server Configuration**Delete Example**

The following example shows how to delete a DHCP Server configuration.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/">
  <soapenv:Header>
    <cai3:SessionId>7f202db2b885445389e13951761b086c</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>DHCPServer@http://schemas.ericsson.com/scm/DHCPServer/
    </cai3:MOType>
      <cai3:MOId>
        <dhc:poolName>poolone</dhc:poolName>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>7f202db2b885445389e13951761b086c</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <dhc:poolName xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">poolone
        </dhc:poolName>
        <dhc:deviceId xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPServer/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1
        </dhc:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 66 Delete DHCP Server Configuration



18 DHCP Relay Agent

This section covers the MO `DHCPRelayAgent`.

MOType

`DHCPRelayAgent@http://schemas.ericsson.com/scm/DHCPRelayAgent/`

18.1 Request Data

18.1.1 Parameters

MOId

Table 34 *DHCPRelayAgent MOId*

| Parameter | Type | Occurrence | Description |
|--------------------------------|----------------------------------|------------|--|
| <code>deviceId</code> | Case Sensitive String | Mandatory | Master identifier of the device. |
| <code>interfaceType</code> | <code>stringType</code> | Mandatory | Represents type of the Ethernet interface. For example, Fast Ethernet or Gigabit Ethernet. |
| <code>interfaceNumber</code> | <code>interfaceNumberType</code> | Mandatory | Represents the slots/port of the interface. For example , 0/1. |
| <code>serviceInstanceId</code> | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in `DHCPRelayAgent` operations.

Table 35 *DHCPRelayAgent Operation Parameters*

| Node Name | Data Type | Occurrence | | | | Description |
|------------------------------|----------------------------------|------------|-----|-----|--------|--|
| | | Create | Get | Set | Delete | |
| <code>interfaceType</code> | <code>stringType</code> | M | N/A | M | N/A | Represents type of the Ethernet interface. For example, Fast Ethernet or Gigabit Ethernet, where the DHCP-clients are located. |
| <code>interfaceNumber</code> | <code>interfaceNumberType</code> | M | N/A | M | N/A | Represents the slots/port of the interface. For example , 0/1, where the DHCP-clients are located. |
| <code>dhcpServerIp</code> | <code>ipAddressType</code> | M | N/A | M | N/A | Represents the IP of the DHCP Server where the DHCP requests will be forwarded to. |



18.2 Examples

Create Example

The following example shows how to create a DHCP RelayAgent.

Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/">
  <soapenv:Header>
    <cai3:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>DHCPRelayAgent@http://schemas.ericsson.com/scm/DHCPRelayAgent/
</cai3:MOType>
      <cai3:MOId>
        <dhc:interfaceType>FastEthernet</dhc:interfaceType>
        <dhc:interfaceNumber>1/0</dhc:interfaceNumber>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <dhc:CreateDHCPRelayAgent interfaceNumber="1/0" interfaceType="FastEthernet">
          <dhc:interfaceType>FastEthernet</dhc:interfaceType>
          <dhc:excludedAddresses>
            <dhc:interfaceNumber>1/0</dhc:interfaceNumber>
            <dhc:dhcpServerIp>192.168.0.1</dhc:dhcpServerIp>
            <dhc:dhcpServerIp>192.168.0.2</dhc:dhcpServerIp>
          </dhc:CreateDHCPRelayAgent>
        </dhc:MOAttributes>
      </cai3:Create>
    </soapenv:Body>
  </soapenv:Envelope>
```

Create Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <dhc:interfaceType
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">FastEthernet</dhc:interf
        <dhc:interfaceNumber
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">1/0</dhc:interfaceNumber
        <dhc:deviceId
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</dhc:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>
```

Example 67 Create a DHCP RelayAgent

Get Example

The following example shows how to get a DHCP RelayAgent configuration.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
xmlns:types="http://schemas.ericsson.com/scm/Types/">
  <soapenv:Header>
    <cai3:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>DHCPRelayAgent@http://schemas.ericsson.com/scm/DHCPRelayAgent/</cai3:MOType>
      <cai3:MOId>
        <dhc:interfaceType>FastEthernet</dhc:interfaceType>
        <dhc:interfaceNumber>1/0</dhc:interfaceNumber>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseDHCPRelayAgent:GetResponseDHCPRelayAgent
xmlns="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
xmlns:GetResponseDHCPRelayAgent="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:types="http://schemas.ericsson.com/scm/Types/">
          <dhc:interfaceType>FastEthernet</dhc:interfaceType>
          <dhc:interfaceNumber>1/0</dhc:interfaceNumber>
          <dhc:dhcpServerIp>192.168.0.1</dhc:dhcpServerIp>
          <dhc:dhcpServerIp>192.168.0.2</dhc:dhcpServerIp>
        </GetResponseDHCPRelayAgent:GetResponseDHCPRelayAgent>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 68 Get a DHCP RelayAgent Configuration

Set Example

The following example shows how to update a DHCP RelayAgent configuration.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/">
  <soapenv:Header>
    <cai3:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>DHCPRelayAgent@http://schemas.ericsson.com/scm/DHCPRelayAgent/</cai3:MOTy
      <cai3:MOId>
        <dhc:interfaceType>FastEthernet</dhc:interfaceType>
        <dhc:interfaceNumber>1/0</dhc:interfaceNumber>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <dhc:SetDHCPRelayAgent interfaceNumber="1/0" interfaceType="fa">
          <dhc:interfaceType>FastEthernet</dhc:interfaceType>
          <dhc:interfaceNumber>1/0</dhc:interfaceNumber>
          <dhc:dhcpServerIp>192.168.0.3</dhc:dhcpServerIp>
        </dhc:SetDHCPRelayAgent>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 69 Set a DHCP RelayAgent Configuration

Delete Example

The following example shows how to delete a DHCP RelayAgent configuration.



Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/">
  <soapenv:Header>
    <cai3:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>DHCPRelayAgent@http://schemas.ericsson.com/scm/DHCPRelayAgent/
      </cai3:MOType>
      <cai3:MOId>
        <dhc:interfaceType>FastEthernet</dhc:interfaceType>
        <dhc:interfaceNumber>1/0</dhc:interfaceNumber>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>2e9ad80d04a54f73a84c2a0daf18b31b</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <dhc:interfaceType
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">FastEthernet</dhc:int
        </dhc:interfaceType>
        <dhc:interfaceNumber
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">1/0</dhc:interfaceNum
        </dhc:interfaceNumber>
        <dhc:deviceId
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:dhc="http://schemas.ericsson.com/scm/DHCPRelayAgent/"
          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</dhc:deviceId
        </dhc:deviceId>
      </MOId>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

Example 70 Delete a DHCP RelayAgent Configuration



19 Firewall

This section covers the MO Firewall.

MOType

Firewall@http://schemas.ericsson.com/scm/Firewall/

19.1 Request Data

19.1.1 Parameters

MOId

Table 36 Firewall MOId

| Parameter | Type | Occurrence | Description |
|-------------------|-----------------------|------------|---|
| deviceId | Case Sensitive String | Mandatory | Master identifier of the device. |
| ruleNumber | ipAddressOrDigitType | Mandatory | Represents the identifier number of a rule. For Cisco devices this is the identifier if the rule should be a standard (1-99) or extended (100-199) access control list. |
| serviceInstanceId | String | Optional | Used as the identifier of the service instance of the feature instance is related to. |

MOAttributes

The following table covers the parameters that can be used in Firewall operations.

Table 37 Firewall Operation Parameters

| Node Name | | Data Type | Occurrence | | | | Description |
|------------|------------|----------------------|------------|-----|-----|--------|---|
| | | | Create | Get | Set | Delete | |
| ruleNumber | | ipAddressOrDigitType | M | N/A | M | N/A | Represents the identifier number of a rule. For Cisco devices this is the identifier if the rule should be a standard (1-99) or extended (100-199) access control list. |
| rules | | complex | O | N/A | O | N/A | - |
| | rule | complex | M | N/A | M | N/A | - |
| | permission | stringType | M | N/A | M | N/A | Represents the permission that the rule should apply, for example permit or deny. |



Table 37 Firewall Operation Parameters

| Node Name | | Data Type | Occurrence | | | | Description |
|--------------|---------------------------|----------------------|------------|-----|-----|--------|--|
| | | | Create | Get | Set | Delete | |
| | protocol | stringType | O | N/A | O | N/A | Specifies which protocol that should be included in the rule. |
| | sourceHost | ipAddressType | M | N/A | M | N/A | Represents the IP of the source. |
| | sourceWildcard | stringType | M | N/A | M | N/A | Represents the wildcard of the source. |
| | destinationHost | ipAddressType | O | N/A | O | N/A | Represents the IP of the destination. |
| | destinationWildcard | stringType | O | N/A | O | N/A | Represents the wildcard of the destination. |
| interfacedes | | complex | O | N/A | O | N/A | Represents the interfaces where the firewall policies to be applied. |
| | interface | complex | O | N/A | O | N/A | - |
| | interfaceType | stringType | O | N/A | O | N/A | Specifies the type of interface to be configured, Fast Ethernet or Gigabit Ethernet. |
| | interfaceNumber | interfaceNumberType | O | N/A | O | N/A | Represents the slot/port of the interface, for example, 0/1. |
| | unitNumber | ipAddressOrDigitType | O | N/A | O | N/A | Represents the sub interface of Ethernet interface on a Juniper device. |
| | interfaceTrafficDirection | stringType | O | N/A | O | N/A | Specifies the firewall policies to be applied in which direction, traffic in or out. |

19.2 Examples

Create Example

The following example shows how to create a Firewall.

Create Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:fir="http://schemas.ericsson.com/scm/Firewall/">
  <soapenv:Header>
    <cai3:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOTYPE>Firewall@http://schemas.ericsson.com/scm/Firewall/</cai3:MOTYPE>
      <cai3:MOId>
        <fir:ruleNumber>101</fir:ruleNumber>
        <fir:deviceId>Device1</fir:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <fir:CreateFirewall ruleNumber="101">
          <fir:ruleNumber>101</fir:ruleNumber>
          <fir:rules>
            <fir:rule>
              <fir:permission>permit</fir:permission>
              <fir:protocol>tcp</fir:protocol>
            </fir:rule>
          </fir:rules>
        </fir:CreateFirewall>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```



```

        <fir:sourceHost>192.168.0.0</fir:sourceHost>
        <fir:sourceWildcard>0.0.0.255</fir:sourceWildcard>
        <fir:destinationHost>192.168.1.0</fir:destinationHost>
        <fir:destinationWildcard>0.0.0.255</fir:destinationWildcard>
    </fir:rule>
    <fir:rule>
        <fir:permission>permit</fir:permission>
        <fir:protocol>icmp</fir:protocol>
        <fir:sourceHost>192.168.0.1</fir:sourceHost>
        <fir:sourceWildcard>0.0.0.0</fir:sourceWildcard>
        <fir:destinationHost>192.168.0.254</fir:destinationHost>
        <fir:destinationWildcard>0.0.0.0</fir:destinationWildcard>
    </fir:rule>
</fir:rules>
<fir:interfaces>
    <fir:interface>
        <fir:interfaceType>fa</fir:interfaceType>
        <fir:interfaceNumber>1/0</fir:interfaceNumber>
        <fir:unitNumber></fir:unitNumber>
        <fir:interfaceTrafficDirection>in</fir:interfaceTrafficDirection>
    </fir:interface>
    <fir:interface>
        <fir:interfaceType>fa</fir:interfaceType>
        <fir:interfaceNumber>2/0</fir:interfaceNumber>
        <fir:unitNumber></fir:unitNumber>
        <fir:interfaceTrafficDirection>out</fir:interfaceTrafficDirection>
    </fir:interface>
</fir:interfaces>
</fir:CreateFirewall>
</cai3:MOAttributes>
</cai3:Create>
</soapenv:Body>
</soapenv:Envelope>

```

Create Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <CreateResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <fir:ruleNumber
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:fir="http://schemas.ericsson.com/scm/Firewall/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">101</fir:ruleNumber>
        <fir:deviceId
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:fir="http://schemas.ericsson.com/scm/Firewall/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</fir:deviceId>
      </MOId>
    </CreateResponse>
  </S:Body>
</S:Envelope>

```

Example 71 Create a Firewall

Get Example

The following example shows how to get a Firewall configuration.



Get Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:fir="http://schemas.ericsson.com/scm/Firewall/">
  <soapenv:Header>
    <cai3:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>Firewall@http://schemas.ericsson.com/scm/Firewall/</cai3:MOType>
      <cai3:MOId>
        <fir:ruleNumber>101</fir:ruleNumber>
        <fir:deviceId>Device1</fir:deviceId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Get Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseFirewall:GetResponseFirewall
xmlns="http://schemas.ericsson.com/scm/Firewall/"
xmlns:GetResponseFirewall="http://schemas.ericsson.com/scm/Firewall/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:fir="http://schemas.ericsson.com/scm/Firewall/"
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
          <fir:ruleNumber>101</fir:ruleNumber>
          <fir:rules>
            <fir:rule>
              <fir:permission>permit</fir:permission>
              <fir:protocol>tcp</fir:protocol>
              <fir:sourceHost>192.168.0.0</fir:sourceHost>
              <fir:sourceWildcard>0.0.0.255</fir:sourceWildcard>
              <fir:destinationHost>192.168.1.0</fir:destinationHost>
              <fir:destinationWildcard>0.0.0.255</fir:destinationWildcard>
            </fir:rule>
            <fir:rule>
              <fir:permission>permit</fir:permission>
              <fir:protocol>icmp</fir:protocol>
              <fir:sourceHost>192.168.0.1</fir:sourceHost>
              <fir:sourceWildcard>host</fir:sourceWildcard>
              <fir:destinationHost>192.168.0.254</fir:destinationHost>
              <fir:destinationWildcard>host</fir:destinationWildcard>
            </fir:rule>
          </fir:rules>
        </GetResponseFirewall:GetResponseFirewall>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 72 Get a Firewall Configuration

Set Example

The following example shows how to update a Firewall configuration.



Set Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:fir="http://schemas.ericsson.com/scm/Firewall/">
  <soapenv:Header>
    <cai3:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Firewall@http://schemas.ericsson.com/scm/Firewall/</cai3:MOType>
      <cai3:MOId>
        <fir:ruleNumber>101</fir:ruleNumber>
        <fir:deviceId>Device1</fir:deviceId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <fir:SetFirewall ruleNumber="101">
          <fir:ruleNumber>101</fir:ruleNumber>
          <fir:rules>
            <fir:rule>
              <fir:permission>permit</fir:permission>
              <fir:protocol>tcp</fir:protocol>
              <fir:sourceHost>192.168.0.0</fir:sourceHost>
              <fir:sourceWildcard>0.0.0.255</fir:sourceWildcard>
              <fir:destinationHost>192.168.1.0</fir:destinationHost>
              <fir:destinationWildcard>0.0.0.255</fir:destinationWildcard>
            </fir:rule>
            <fir:rule>
              <fir:permission>deny</fir:permission>
              <fir:protocol>icmp</fir:protocol>
              <fir:sourceHost>192.168.0.1</fir:sourceHost>
              <fir:sourceWildcard>0.0.0.0</fir:sourceWildcard>
              <fir:destinationHost>192.168.0.254</fir:destinationHost>
              <fir:destinationWildcard>0.0.0.0</fir:destinationWildcard>
            </fir:rule>
          </fir:rules>
          <fir:interfaces>
            <fir:interface>
              <fir:interfaceType>fa</fir:interfaceType>
              <fir:interfaceNumber>3/0</fir:interfaceNumber>
              <fir:unitNumber></fir:unitNumber>
              <fir:interfaceTrafficDirection>in</fir:interfaceTrafficDirection>
            </fir:interface>
            <fir:interface>
              <fir:interfaceType>fa</fir:interfaceType>
              <fir:interfaceNumber>4/0</fir:interfaceNumber>
              <fir:unitNumber></fir:unitNumber>
              <fir:interfaceTrafficDirection>out</fir:interfaceTrafficDirection>
            </fir:interface>
          </fir:interfaces>
        </fir:SetFirewall>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Set Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

Example 73 Set a Firewall Configuration



Delete Example

The following example shows how to delete a Firewall configuration.

Delete Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:fir="http://schemas.ericsson.com/scm/Firewall/">
  <soapenv:Header>
    <cai3:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>Firewall@http://schemas.ericsson.com/scm/Firewall/</cai3:MOType>
      <cai3:MOId>
        <fir:ruleNumber>101</fir:ruleNumber>
        <fir:deviceId>Device1</fir:deviceId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Delete Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>be4b34a2c1c2449a8f00d00d513d7f9f</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOId>
        <fir:ruleNumber
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:fir="http://schemas.ericsson.com/scm/Firewall/"
          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">101</fir:ruleNumber>
        <fir:deviceId
          xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:fir="http://schemas.ericsson.com/scm/Firewall/"
          xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">Device1</fir:deviceId>
        </MOId>
      </DeleteResponse>
    </S:Body>
</S:Envelope>
```

Example 74 Delete a Firewall Configuration



20 Faults and Errors

The generic structure for fault responses is covered in *Generic CAI3G Interface 1.2*, Reference [2]. That document also covers the generic fault codes, which are applicable to all CAI3G operations.

This section covers the subordinate CAI3G errors. They can appear in the `errorcode` element in the error message.

Only Resource Configuration specific error codes are described in this section. These error codes are included in the Fault type `PGFault`.

For generic error codes, and information about the different Fault types, see *CAI3G Implementation*, Reference [5].

20.1 Subordinate Resource Configuration Error Codes

The following table covers subordinate error codes for Resource Configuration commands over the CAI3G interface.

Table 38 Subordinate Resource Configuration Error Codes

| Error Code | Error Message | Error Details | Operation |
|------------|---|--|-----------|
| 45001 | Failed to connect to the device. | Failed to connect to device <code><device IP>:<device Port></code> . | All |
| 45002 | Failure during communication with the device. | Dynamic message, describing the communication error. | All |
| 45003 | Failed to find model. | Model <code><feature model name></code> does not exist. | All |
| 45004 | Failed to obtain template. | Dynamic message, describing the failure. | All |
| 45005 | Failure during execution of the template. | Dynamic message, describing the failure. | All |
| 45006 | Failure during validation of the request towards the model. | Dynamic message, describing the validation error. | All |
| 45007 | Failure when closing the connection to the device. | Dynamic message, describing the failure. | All |
| 45008 | Failed to find device. | Device <code><device identifier></code> not found in the device inventory. | All |
| 45009 | Operation failed, operation not allowed. | Dynamic message, describing the failure. | C/S/D |
| 45010 | Wrong device configuration. | Dynamic message, describing the failure. | All |



| Error Code | Error Message | Error Details | Operation |
|------------|---|--|-----------|
| 45011 | Failed to delete feature | Dynamic message, describing the failure. | D |
| 45012 | Failed to delete feature | Dynamic message, describing the failure. | D |
| 45013 | Operation failed, rollback has been performed successfully. | Dynamic message, describing the failure. | C/S/D |
| 45014 | Operation failed, rollback was unsuccessful. | Dynamic message, describing the failure. | C/S/D |

20.2 CAI3G Error Message Example

The following, shown in Example 75, is an example of a CAI3G error message.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>fc631b11d5374e059e6d494c3932dc8c</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:Fault xmlns:ns2="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ns3="http://www.w3.org/2003/05/soap-envelope">
      <faultcode>ns2:Server</faultcode>
      <faultstring>This is a server fault</faultstring>
      <detail>
        <Cai3gFault:Cai3gFault xmlns="http://schemas.ericsson.com/cai3g1.2/" xmlns:Cai3gFault="http://schemas.ericsson.com/cai3g1.2/">
          <faultcode>4006</faultcode>
          <faultreason>
            <reasonText>External error.</reasonText>
          </faultreason>
          <faultrole>MF</faultrole>
          <details>
            <PGFault:PGFault xmlns="http://schemas.ericsson.com/pg/1.0" xmlns:PGFault="http://schemas.ericsson.com/pg/1.0">
              <errorcode>45001</errorcode>
              <errormessage>Failed to connect to the device</errormessage>
              <errordetails>Failed to connect to device [device]: [2123] - [Processed by PG Node: devenv15]</errordetails>
            </PGFault:PGFault>
          </details>
        </Cai3gFault:Cai3gFault>
      </detail>
    </ns2:Fault>
  </S:Body>
</S:Envelope>
```

Example 75 CAI3G Error Message



Reference List

Ericsson Documents

- [1] *Glossary of Terms and Acronyms*, 0033-CSH 109 628 Uen
- [2] *Generic CAI3G Interface 1.2 Specification*, 2/155 19-FAY 302 0003 Uen
- [3] *Library Overview*, 18/1553-CSH 109 628 Uen
- [4] *User Guide for Resource Configuration*, 11/1553-CSH 109 628 Uen
- [5] *CAI3G Implementation*, 26/155 19-CSH 109 628 Uen