

# CAI3G MO Examples for Resource Configuration

Ericsson Dynamic Activation 1

INTERFACE DESCRIPTION

## **Copyright**

© Ericsson AB 2018. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

## **Disclaimer**

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

## **Trademark List**

All trademarks mentioned herein are the property of their respective owners. These are shown in the document Trademark Information.



# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose and Scope	1
1.2	Target Group	1
1.3	Typographic Conventions	1
1.4	Prerequisites	1
<b>2</b>	<b>Common Data Types</b>	<b>3</b>
<b>3</b>	<b>BGP</b>	<b>5</b>
3.1	Request Data	5
3.1.1	Parameters	5
3.2	Examples	7
<b>4</b>	<b>MPLS</b>	<b>13</b>
4.1	Request Data	13
4.1.1	Parameters	13
4.2	Examples	14
<b>5</b>	<b>OSPF</b>	<b>19</b>
5.1	Request Data	19
5.1.1	Parameters	19
5.2	Examples	22
<b>6</b>	<b>Policy</b>	<b>27</b>
6.1	Request Data	27
6.1.1	Parameters	27
6.2	Examples	28
<b>7</b>	<b>VRF</b>	<b>33</b>
7.1	Request Data	33
7.1.1	Parameters	33
7.2	Examples	35
<b>8</b>	<b>Bridge Domain</b>	<b>43</b>
8.1	Request Data	43
8.1.1	Parameters	43
8.2	Examples	44
<b>9</b>	<b>EVC Bridge</b>	<b>49</b>



9.1	Request Data	49
9.1.1	Parameters	49
9.2	Examples	50
<b>10</b>	<b>IPPIM</b>	<b>55</b>
10.1	Request Data	55
10.1.1	Parameters	55
10.2	Examples	56
<b>11</b>	<b>VPLS</b>	<b>61</b>
11.1	Request Data	61
11.1.1	Parameters	61
11.2	Examples	62
<b>12</b>	<b>Xconnect</b>	<b>67</b>
12.1	Request Data	67
12.1.1	Parameters	67
12.2	Examples	68
<b>13</b>	<b>Ethernet Interface</b>	<b>73</b>
13.1	Request Data	73
13.1.1	Parameters	73
13.2	Examples	74
<b>14</b>	<b>Loopback Interface</b>	<b>79</b>
14.1	Request Data	79
14.1.1	Parameters	79
14.2	Examples	80
<b>15</b>	<b>NVE Interface</b>	<b>85</b>
15.1	Request Data	85
15.1.1	Parameters	85
15.2	Examples	86
<b>16</b>	<b>Serial Interface</b>	<b>91</b>
16.1	Request Data	91
16.1.1	Parameters	91
16.2	Examples	92
<b>17</b>	<b>UNI</b>	<b>97</b>
17.1	Request Data	97
17.1.1	Parameters	97
17.2	Examples	98



<b>18</b>	<b>DHCP Server</b>	<b>103</b>
18.1	Request Data	103
18.1.1	Parameters	103
18.2	Examples	104
<b>19</b>	<b>DHCP Relay Agent</b>	<b>109</b>
19.1	Request Data	109
19.1.1	Parameters	109
19.2	Examples	110
<b>20</b>	<b>Firewall</b>	<b>115</b>
20.1	Request Data	115
20.1.1	Parameters	115
20.2	Examples	116
	<b>Reference List</b>	<b>121</b>





# 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 provides examples of all CAI3G Managed Object (MO) interface models that are bundled with the Resource Configuration solution. There are corresponding implementation available as reusable assets, but not included in the release package.

This document is not a tutorial of CAI3G; it must be used together with [Generic CAI3G Interface 1.2](#) and [Provisioning over CAI3G for Resource Configuration](#).

## 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 \[4\]](#).

## 1.3 Typographic Conventions

Typographic conventions are described in [Library Overview, Reference \[4\]](#).

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

<b>M</b>	Mandatory
<b>O</b>	Optional
<b>N/A</b>	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](#)



— Knowledge about Provisioning over CAI3G for Resource Configuration



## 2 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,dvmp,es,isis,l2circuit,l2vpn,msdp,ospf,ospf2,ospf3,pim,rip,rsvp,static	Represents type of the protocol and different possible protocols available for policy.
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.



Type	Value/Pattern	Description
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.



## 3 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/

### 3.1 Request Data

#### 3.1.1 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	unsignedShort	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	unsignedShort	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	unsignedShort	O	N/A	O	N/A	Represents unique id of redistributed protocol. For example, OSPF is used as protocol, protocol id represents ospf id.
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.



Table 3 BGP Operation Parameters

Node Name		Data Type	Occurrence				Description
			Create	Get	Set	Delete	
	policyType	stringType	O	N/A	O	N/A	Represents internal or external redistributed protocol type.
	metric	unsignedShort	O	N/A	O	N/A	Represents route metric of the redistributed protocol.
vrf		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	ipAddressType	M	N/A	M	N/A	IP address of VRF neighbor.
	remoteAs	unsignedShort	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	unsignedShort	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	unsignedShort	O	N/A	O	N/A	Represents route metric of the redistributed protocol.

## 3.2 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.xmlsoap.org/CAI3GMO/">
  <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/ma/}
        <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.ericsson.com/CAI3GMO/">
  <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:cai3="http://schemas.xmlsoap.org/CAI3GMO/">
        <scm:deviceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.xmlsoap.org/CAI3GMO/">

```



```

        <bgp:asNumber xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://s
        <bgp:groupName xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://s
    </MOId>
  </CreateResponse>
</S:Body>
</S:Envelope>

```

## Example 1 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://s
  <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/L3VPN/
          <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.eri
  <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/" xmlns:G
          <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>
        </GetResponseBGP:GetResponseBGP>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>

```



```

<bgp:vrf>
  <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:vrf>
</GetResponseBGP:GetResponseBGP>
</MOAttributes>
</GetResponse>
</S:Body>
</S:Envelope>

```

## Example 2 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://schemas.ericsson.com/scm/BGP">
  <soapenv:Header>
    <cai3:SessionId>{#Project#SESSION_ID}</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MType>BGP@http://schemas.ericsson.com/scm/BGP</cai3:MType>
      <cai3:MOId>
        <scm:serviceInstanceId>{http://schemas.ericsson.com/ma/CA/L3VPN/}L3
        <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.eri
  <S:Header>
    <cai3g:SessionId>e18e1ba7c0374801a447f409a076d72a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>

```

### Example 3 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.xmlsoap.org/soap/envelope/">
  <soapenv:Header>
    <cai3:SessionId>${#Project#SESSION_ID}</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:M0Type>BGP@http://schemas.ericsson.com/scm/BGP/</cai3:M0Type>
      <cai3:M0Id>
        <scm:serviceInstanceId>{http://schemas.ericsson.com/ma/CA/L3VPN/}L3VPN##serviceId=1234
        <scm:deviceId>CE1</scm:deviceId>
        <bgp:asNumber>20</bgp:asNumber>
        <bgp:groupName>external-peers</bgp:groupName>
      </cai3:M0Id>
    </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>e18e1ba7c0374801a447f409a076d72a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <M0Id>
        <scm:serviceInstanceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/ma/CA/L3VPN/">
        <scm:deviceId xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/ma/CA/L3VPN/">
        <bgp:asNumber xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/scm/BGP/">
        <bgp:groupName xmlns:bgp="http://schemas.ericsson.com/scm/BGP/" xmlns:cai3="http://schemas.ericsson.com/scm/BGP/">
      </M0Id>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

**Example 4 Delete BGP**



## 4 MPLS

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

### MOType

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

## 4.1 Request Data

### 4.1.1 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.



## 4.2 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 5 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/cai3g1.2/" 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/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>ae0206a7fc9d465d8a4f86f9504954ba</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseMPLS:GetResponseMPLS xmlns="http://schemas.ericsson.com/scm/MPLS/" xmlns:GetResponseMPLS="http://schemas.ericsson.com/scm/MPLS/" xmlns:cai3="http://schemas.ericsson.com/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/">
          <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 6 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 7 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 8 Delete MPLS





## 5 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/>

### 5.1 Request Data

#### 5.1.1 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.
serviceInstance Id	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	
ospfId		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	unsignedShort	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	unsignedShort	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	unsignedShort	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	unsignedShort	O	N/A	O	N/A	Explicitly specifies the cost of sending a packet on an OSPF interface.
	retransmitInterval	unsignedShort	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	unsignedShort	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	unsignedByte	O	N/A	O	N/A	Sets priority to help determine the OSPF designated router for a network.
	helloInterval	unsignedByte	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	unsignedShort	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	unsignedShort	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.
	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.



Table 7 OSPF Operation Parameters

Node Name		Data Type	Occurrence				Description
			Create	Get	Set	Delete	
	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	unsignedShort	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.

## 5.2 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 9 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/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:Get>
      <cai3:MOType>OSPF@http://schemas.ericsson.com/scm/OSPF</cai3:MOType>
      <cai3:MOType>
        <ospf:ospfId>0.0.0.3</ospf:ospfId>
        <ospf:deviceId>Device1</ospf:deviceId>
      </cai3:MOType>
    </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>
        <GetResponseOSPF:GetResponseOSPF xmlns="http://schemas.ericsson.com/scm/OSPF/"
xmlns:GetResponseOSPF="http://schemas.ericsson.com/scm/OSPF/"
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/">
          <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 10 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/cai3g1.2/" 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/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 11 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 12 Delete OSPF**



## 6 Policy

This section covers the MO Policy.

### MOType

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

## 6.1 Request Data

### 6.1.1 Parameters

#### MOId

Table 8 Policy MOId

Parameter	Type	Occurrence	Description
policyName	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 Policy operations.

Table 9 Policy Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
policyName	stringType	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.
protocol	policyProtocolType	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.
acceptTerm	stringType	O	N/A	O	N/A	Term name of policy for the accept statement. This represents the term for accepting the routes.
rejectTerm	stringType	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.



## 6.2 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 13 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 14 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 15 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 16 Delete Policy





## 7 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/>

### 7.1 Request Data

#### 7.1.1 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		-	0	N/A	0	N/A	Represents import route target. Route targets are used to share routes among VRFs. Route target takes the same form as RD.
	Import	routeDistiguisherType	0	N/A	0	N/A	-
rtExport		-	0	N/A	0	N/A	Represents export route target for the specified VRF to export a route from routing table.
	export	routeDistiguisherType	0	N/A	0	N/A	-
vrfTarget		stringType	0	N/A	0	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		-	0	N/A	0	N/A	-
	bgp	-	0	N/A	0	N/A	Represents the BGP protocol to configure BGP sessions with Customer Edge (CE) router.
	asNumber	unsignedShort	0	N/A	0	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	0	N/A	0	N/A	Name of the BGP group, recognizing specified BGP systems.
	bgpType	stringType	0	N/A	0	N/A	BGP type represents internal or external BGP.
neighbors		-	0	N/A	0	N/A	-
	neighbor	-	0	N/A	0	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	unsignedShort	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	unsignedShort	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	unsignedShort	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.

## 7.2 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: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:interfaces>
```



```

        <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 17 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>
```



```

    </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 18 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 19 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 20 Delete VRF





## 8 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/

## 8.1 Request Data

### 8.1.1 Parameters

#### MOId

Table 12 Bridge Domain MOId

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	0	N/A	0	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	0	N/A	0	N/A	Represents interface number of Ethernet interface.
subInterface	stringType	0	N/A	0	N/A	Represents sub interface of Ethernet interface.



Table 13 Bridge Domain Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
vniNumber	stringType	0	N/A	0	N/A	Creates a Virtual Network Identifier (VNI) member or a range of VNI members.
networkId	networkId	0	N/A	0	N/A	Network address of Bridge Domain Interface (BDI).
multicastGroup	stringType	0	N/A	0	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	0	N/A	0	N/A	Integer from 1 to 4294967295 that uniquely identifies a service instance on an interface.

## 8.2 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 21 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:M0Type>BridgeDomain@http://schemas.ericsson.com/scm/BridgeDomain/
    </cai3:M0Type>
    <cai3:M0Id>
      <brid:vlanId>200</brid:vlanId>
      <brid:deviceId>Device1</brid:deviceId>
    </cai3:M0Id>
    </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/">
      <M0Attributes>
        <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>
      </M0Attributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

**Example 22 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 23 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/cai3g1.2/" xmlns:brid="http://
schemas.ericsson.com/scm/BridgeDomain/">
  <soapenv:Header>
    <cai3:SessionId>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:M0Type>BridgeDomain@http://schemas.ericsson.com/scm/BridgeDomain/
    </cai3:M0Type>
    <cai3:M0Id>
      <brid:vlanId>200</brid:vlanId>
      <brid:deviceId>Device1</brid:deviceId>
    </cai3:M0Id>
    </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>fb8e75f1862d4f538928ffeb3a6cd5cc</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <M0Id>
        <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>
      </M0Id>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

**Example 24 Delete Bridge Domain**



## 9 EVC Bridge

This section covers the MO EvcBridge.

### MOType

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

## 9.1 Request Data

### 9.1.1 Parameters

#### MOId

Table 14 EvcBridge MOId

Parameter	Type	Occurrence	Description
deviceId	Case Sensitive String	Mandatory	Master identifier of the device.
groupName	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 EvcBridge operations.

Table 15 EvcBridge Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
groupName	stringType	M	N/A	M	N/A	Represents the name of a bridge group.
domainName	stringType	M	N/A	M	N/A	Represents the name of a bridge domain.
interfaces	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.
interface	complex	M	N/A	M	N/A	
interfaceType	stringType	M	N/A	M	N/A	Represents type of the interface. For example, Gigabit Ethernet.
interfaceNumber	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	0	N/A	0	N/A	Represents the name of a Virtual Forwarding Interface (VFI).
neighbors	complex	0	N/A	0	N/A	
neighbor	complex	0	N/A	0	N/A	Adds a pseudowire to a bridge VFI.
neighborIp	ipAddressType	0	N/A	0	N/A	Specifies IP address of the neighboring router.
pwId	ipAddressTypeOrDigitType	0	N/A	0	N/A	Represents the pseudowire ID.
pwClass	stringType	0	N/A	0	N/A	Represents the template name of a pseudowire class.

## 9.2 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 25 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 26 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/cai3g1.2/"
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/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>6d994f306a7e416cb2a329b9cd1d2792</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

## Example 27 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 28 Delete a EVC Bridge Configuration**



## 10 IPPIM

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

### MOType

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

### 10.1 Request Data

#### 10.1.1 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.
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.



## 10.2 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 29 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 30 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:MType>IPPIM@http://schemas.ericsson.com/scm/IPPIM/</cai3:MType>
      <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 31 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/cai3g1.2/" 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/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>5b54206d221a488599ad31061fe399da</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse 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>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

## Example 32 Delete IP PIM





# 11 VPLS

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

## MOType

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

## 11.1 Request Data

### 11.1.1 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	0	N/A	0	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	0	N/A	0	N/A	Specifies the type of interface to be configured, for example Gigabit Ethernet.
bDInterfaceNumber	interfaceNumberType	0	N/A	0	N/A	Represents the rack/slot/instance/port of the interface, for example, 0/0/0/1.
splitHorizonInterfaces	complex	0	N/A	0	N/A	Represents the pseudowire ID
sHInterfaceType	stringType	0	N/A	0	N/A	Specifies the type of interface to be configured, for example Gigabit Ethernet.
sHInterfaceNumber	interfaceNumberType	0	N/A	0	N/A	Represents the rack/slot/instance/port of the interface, for example, 0/0/0/1.

## 11.2 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:bridgeGroupName
        <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 33 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 34 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 35 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:bridgeGroupName>
        <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 36 Delete a VPLS Configuration**



## 12 Xconnect

This section covers the cross connection MO Xconnect.

### MOType

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

### 12.1 Request Data

#### 12.1.1 Parameters

##### MOId

Table 20 Xconnect MOId

Parameter	Type	Occurrence	Description
deviceId	Case Sensitive String	Mandatory	Master identifier of the device.
groupName	stringType	Mandatory	Represents the name of a 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 Xconnect operations.

Table 21 Xconnect Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
groupName	stringType	M	N/A	M	N/A	Represents the name of a group.
xconnectName	stringType	M	N/A	M	N/A	Represents the name of the point-to-point cross connection.
interfaces	complex	O	N/A	O	N/A	Represents the interfaces that should be included within the cross connection.
interface	complex	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	interfaceNumberType	M	N/A	M	N/A	Represents the rack/slot/instance /port of the interface, for example 0/0/0/1.
neighborIp	ipAddressType	O	N/A	O	N/A	Specifies IP address of the neighboring router.



Table 21 Xconnect Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
pwId	ipAddressTypeOrDigitType	0	N/A	0	N/A	Represents the pseudowire ID.
pwClass	stringType	0	N/A	0	N/A	Represents the template name of a pseudowire class.

## 12.2 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 37 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>encpmp1s</xcon:pwClass>
        </GetResponseXconnect:GetResponseXconnect>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

**Example 38 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>encpmp1</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 39 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/cai3g1.2/"
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/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>290b71e85f6e4440b35ee8c4cd91eff4</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <DeleteResponse 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>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

**Example 40 Delete a Cross Connection Configuration**



# 13 Ethernet Interface

This section covers the MO Ethernet Interface.

## MOType

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

## 13.1 Request Data

### 13.1.1 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.
serviceInstance Id	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 " <b>l2transport</b> ".
serviceInstanceId	ipAddressOrDigitType	O	N/A	O	N/A	Represents the identity of the Ethernet service instance, valid values are 1 to 8000 (included).



Table 23 Ethernet Interface Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
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.

## 13.2 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 41 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 42 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 43 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 44 Delete Ethernet Interface**



# 14 Loopback Interface

This section covers the MO Loopback Interface.

## MOType

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

## 14.1 Request Data

### 14.1.1 Parameters

#### MOId

Table 24 Loopback Interface MOId

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.



## 14.2 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 45 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 46** 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 47 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 48 Delete a Loopback Interface**





# 15 NVE Interface

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

## MOType

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

## 15.1 Request Data

### 15.1.1 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

## 15.2 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 49 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 50** 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 51 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 52 Delete an NVE interface configuration**



## 16 Serial Interface

This section covers the MO Serial Interface.

### MOType

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

### 16.1 Request Data

#### 16.1.1 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	ipAddressOrDigitType	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	0	N/A	0	N/A	Name of virtual routing forwarding instance configured on serial interface.
networkId	networkId	0	N/A	0	N/A	Represents network address of serial interface.

## 16.2 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>37162d350cb54a3583fa1be274ba93ac</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>37162d350cb54a3583fa1be274ba93ac</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 53 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.xmlsoap.org/soap/envelope/">
  <soapenv:Header>
    <cai3:SessionId>37162d350cb54a3583fa1be274ba93ac</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/soap/envelope/">
  <S:Header>
    <cai3g:SessionId>37162d350cb54a3583fa1be274ba93ac</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseSerialInterface:GetResponseSerialInterface xmlns="http://schemas.ericsson.com/soap/envelope/">
          <ser:interfaceNumber>1/0/0</ser:interfaceNumber>
          <ser:encapsulation>ppp</ser:encapsulation>
        </GetResponseSerialInterface:GetResponseSerialInterface>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

**Example 54** 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/cai3g1.2/" xmlns:ser="http://
schemas.ericsson.com/scm/SerialInterface/">
  <soapenv:Header>
    <cai3:SessionId>37162d350cb54a3583fa1be274ba93ac</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/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>37162d350cb54a3583fa1be274ba93ac</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <SetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
  </S:Body>
</S:Envelope>
```

Example 55 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>37162d350cb54a3583fa1be274ba93ac</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>37162d350cb54a3583fa1be274ba93ac</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 56 Delete Serial Interface



## 17 UNI

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

### MOType

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

### 17.1 Request Data

#### 17.1.1 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.



## 17.2 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 57 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/cai3g1.2/"
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/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94b6469fb6fd46eeb514bf43a9c5f849</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <GetResponseUNI:GetResponseUNI
xmlns="http://schemas.ericsson.com/scm/UNI/"
xmlns:GetResponseUNI="http://schemas.ericsson.com/scm/UNI/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
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 58 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 59 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 60 Delete a UNI configuration





# 18 DHCP Server

This section covers the MO DHCPServer.

## MOType

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

## 18.1 Request Data

### 18.1.1 Parameters

#### MOId

Table 32 DHCPServer MOId

Parameter	Type	Occurrence	Description
deviceId	Case Sensitive String	Mandatory	Master identifier of the device.
poolName	stringType	Mandatory	The name of the DHCP address pool.
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 DHCPServer operations.

Table 33 DHCPServer Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
dhcpDatabase	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.
excludedAddresses	complex	M	N/A	M	N/A	Specifies the IP addresses that the DHCP server should not assign to DHCP clients.
lowAddress	ipAddressType	M	N/A	M	N/A	Represents lowest IP address that needs to be excluded.
highAddress	ipAddressType	O	N/A	O	N/A	Represents highest IP address that needs to be excluded.
poolName	stringType	M	N/A	M	N/A	Represents the name of the DHCP address pool.



Table 33 DHCP Server Operation Parameters

Node Name	Data Type	Occurrence				Description
		Create	Get	Set	Delete	
network	complex	M	N/A	M	N/A	Specifies the subnet network number, and mask of the DHCP address pool.
networkAddress	ipAddressType	M	N/A	M	N/A	Represents the network number of the DHCP pool.
netmask	ipAddressType	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	ipAddressType	M	N/A	M	N/A	A list of IP address of the DNS server that is available to a DHCP client.
defaultGateway	ipAddressType	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.

## 18.2 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 61 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 62 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 63 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</cai3:MOType>
      <cai3:M0Id>
        <dhc:poolName>poolone</dhc:poolName>
        <dhc:deviceId>Device1</dhc:deviceId>
      </cai3:M0Id>
    </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/">
      <M0Id>
        <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>
      </M0Id>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

**Example 64 Delete DHCP Server Configuration**



# 19 DHCP Relay Agent

This section covers the MO DHCPRelayAgent.

## MOType

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

## 19.1 Request Data

### 19.1.1 Parameters

#### MOId

Table 34 DHCPRelayAgent 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 DHCPRelayAgent operations.

Table 35 DHCPRelayAgent 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, where the DHCP-clients are located.
interfaceNumber	interfaceNumberType	M	N/A	M	N/A	Represents the slots/port of the interface. For example, 0/1, where the DHCP-clients are located.
dhcpServerIp	ipAddressType	M	N/A	M	N/A	Represents the IP of the DHCP Server where the DHCP requests will be forwarded to.



## 19.2 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>
      </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>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: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: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 65 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:MOTy
      <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 66** 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:MOType>
      <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 67 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: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>
    </DeleteResponse>
  </S:Body>
</S:Envelope>
```

**Example 68 Delete a DHCP RelayAgent Configuration**





## 20 Firewall

This section covers the MO Firewall.

### MOType

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

## 20.1 Request Data

### 20.1.1 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.
serviceInstance Id	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.
protocol	stringType	O	N/A	O	N/A	Specifies which protocol that should be included in the rule.



Table 37 Firewall Operation Parameters

Node Name		Data Type	Occurrence				Description
			Create	Get	Set	Delete	
	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.
interfacecs		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.

## 20.2 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: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:rules>
        </fir:CreateFirewall>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```



```

</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 69 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 70** 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</fir:interfaceNumber>
              <fir:unitNumber></fir:unitNumber>
              <fir:interfaceTrafficDirection>in</fir:interfaceTrafficDirection>
            </fir:interface>
            <fir:interface>
              <fir:interfaceType>fa</fir:interfaceType>
              <fir:interfaceNumber>4</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 71 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 72 Delete a Firewall Configuration



## 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] Provisioning over CAI3G for Resource Configuration, 31/155 19-CSH 109 628 Uen
- [4] Library Overview, 18/1553-CSH 109 628 Uen