Cisco Evolved Programmable Network Manager 1.2 Maintenance Pack 5 (V.1.2.500) MTOSI API Guide for OSS Integration

First Published: April 18, 2016
EDCS-1542631

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Abstract

The Cisco NBI OSS Integration Guide for MTOSI gives information on OSS Integration using MTOSI northbound interfaces.

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1 Preface

This guide provides information about the MTOSI (Multi-Technology Operations Systems Interface) Northbound APIs supported by Cisco Evolved Programmable Network (EPN) Manager. OSS operators can use this document to integrate Cisco EPN Manager with their OSS system. The MTOSI Northbound APIs documented in this guide are compliant with the MTOSI 3.0 specification.

1.1 Conventions

This document uses the following conventions:

Convention	Indication
bold	Indicates commands, keywords, and user-entered text.
italic	Indicates document titles, new or emphasized terms, and arguments for which you supply values.
[]	Indicates elements that are optional.
{x|y|z}	Indicates required alternative keywords grouped within brackets and separated by vertical bars.
[x|y|z]	Indicates optional alternative keywords grouped in brackets and separated by vertical bars.
String	Indicates a nonsuited set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
`courier font`	Indicates code snippets and XML.
<>	Indicates nonprinting characters such as passwords.
[ ]	Indicates default responses to system prompts.
!,#	Indicates a comment when used at the beginning of a line of code.
Note	Means reader take note. Notes contain helpful suggestions or references to material not covered in the publication.

1.2 Additional User Documentation

The MTOSI Specification with its supporting documents (Business Agreement Interface Specification and System Description) can be obtained at: MTOSI at TM Forum.

1.3 Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly What's New in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:
http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the What's New in Cisco Product Documentation as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

2 Northbound MTOSI Interface

Cisco EPN Manager implements the MTOSI-based SOAP Web Services API as a standards-based Northbound Interface for integrating Cisco EPN Manager with a standards-compliant OSS.

The Cisco EPN Manager implementation of the MTOSI interface supports the retrieval of device inventory, circuit inventory, and notifications about respective resource changes and provisioning. This includes:

- Managed Elements and Equipment Inventory
- Termination Point Inventory
- Ethernet Virtual Connection Resource Inventory
- Subnetwork Connection and Resource Inventory
- Inventory Object Create, Delete and Attribute Value Change (AVC) Notifications
- Service Inventory
- Service Provisioning

2.1 Web Services Standards

As mentioned in the MTOSI specification, the MTOSI SOAP Web Services in Cisco EPN Manager is based on the following Web Services specification from W3C standards:

- Web Service Description Language version 1.1 (WSDL)
- Simple Object Access Protocol version 1.1 (SOAP)
- XML Schema version 1.0 (XSD)

2.2 MTOSI Standards

The Cisco EPN Manager implementation of the MTOSI Interface conforms to the MTOSI 3.0 (TMF 864) information model and operational APIs.

The information model and operations APIs are extended in a standard way to support Cisco's vendor extensions to the MTOSI interface wherever required. These extensions are added as a set of xml schema definitions for the information model extensions and as a set of WSDL definitions for the operational model extensions.

2.3 Communication Patterns

MTOSI interfaces supported by Cisco EPN Manager use the RPC Communication Style and the following Communication Patterns defined in the MTOSI specification:

- Synchronous Request/Reply (SRR) – used for Simple Response.
- Synchronous Iterator (SIT) – used for Multiple Batched Responses.

2.3.1 Iterator Pattern

The operations performed on supported MTOSI interfaces return a single object or multiple objects. In case of operations that return multiple objects, a corresponding synchronous iterator (SIT) operation is defined in MTOSI which handles the responses in multiple batch responses. For example, to retrieve multiple objects of a specific object type, you can use two operations, **getAll<Object>** and **get<Object>Iterator** defined to retrieve objects in multiple batched responses.

2.4 MTOSI Object Naming and Configuration

MTOSI Object Name (Reference - MTOSI Document SD2-7) is the management identifier of an MTOSI Object. It is used to represent MTOSI Object references in the MTOSI request and response messages. It consists of two parts, DN and RDN, explained in the table below:

Distinguished Name (DN) also known as FDN (Fully Distinguished Name)	The management identifier of the MTOSI object. All MTOSI object instances have a unique DN. Note that the MTOSI DN is based on a sequence of RDNs.
Relative Distinguished Names (RDN)	A naming component of the DN. Each MTOSI RDN represents the local name of an MTOSI object instance understood in the context of the MTOSI objects hierarchy structure. The MTOSI RDN is composed of two data: 1. The MTOSI object type identifier. 2. The name of MTOSI object instance.

In Cisco EPN Manager, the RDN value mostly derived from the name of the inventory object that the particular RDN represents (for example, ME RDN, the value is name of the Device) and in some cases where the name alone cannot distinguish the object within its relative scope, a combination of the inventory object attributes will be used.

The following are some examples for the Object Names.

Managed Element Object Name	Equipment Object Name	Termination Point Object Name
<ns8:me> <ns5:name> <ns3:rdn> <ns3:type>MD</ns3:type> <ns3:value>CISCO_EPNM</ns3:value> </ns3:rdn> <ns3:rdn> <ns3:type>ME</ns3:type> <ns3:value>cvg-scapa-223.cisco.com</ns3:value> </ns3:rdn> </ns5:name> </ns8:me>	<ns8:eq> <ns5:name> <ns3:rdn> <ns3:type>MD</ns3:type> <ns3:value>CISCO_EPNM</ns3:value> </ns3:rdn> <ns3:rdn> <ns3:type>ME</ns3:type> <ns3:value>cvg-scapa-223.cisco.com</ns3:value> </ns3:rdn> <ns3:rdn> <ns3:type>EQ</ns3:type> <ns3:value>name=0/0-PORT-0-IDPROM;partnumber=CPAK-100G-LR4</ns3:value> </ns3:rdn> </ns5:name> </ns8:eq>	<ns8:eq> <ns5:name> <ns3:rdn> <ns3:type>MD</ns3:type> <ns3:value>CISCO_EPNM</ns3:value> </ns3:rdn> <ns3:rdn> <ns3:type>ME</ns3:type> <ns3:value>cvg-scapa-223.cisco.com</ns3:value> </ns3:rdn> <ns3:rdn><ns3:type>CTP</ns3:type><ns3:value>name=OTU20/7/0/11;LR=LR_OCH_Transport_Unit_2 </ns3:value> </ns3:rdn> </ns5:name> </ns8:eq>

Note: It is assumed that the Network that Cisco EPN Manager will have unique names for all the Devices in the network and the Network operator would ensure the uniqueness of the Device names. If two or more devices have the same name, the MTOSI API will not produce consistent results when using the Object Name as input to any of the MTOSI APIs.

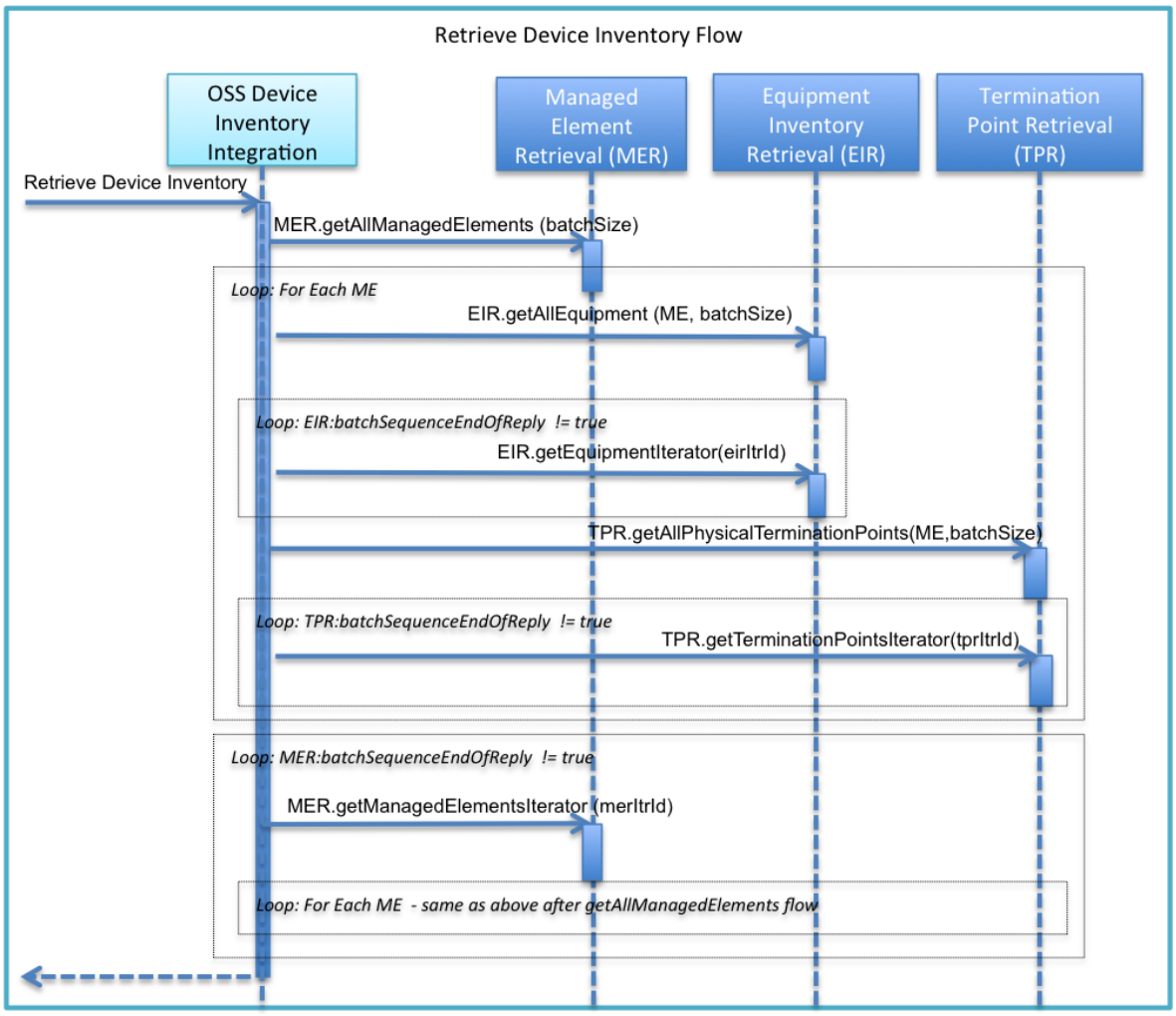
In case of the Networks which cannot have unique names for the devices, Cisco EPN Manager can be configured to handle the Object Names using the ID based references, but this requires an internal configuration change for Cisco EPN Manager which is not directly supported.

2.5 OSS Integration Usage Scenarios

In a typical scenario, OSS clients integrating with Cisco EPN Manager may use the MTOSI Interfaces supported by Cisco EPN Manager to retrieve the device inventory and then export the inventory to other systems or use it to generate reports.

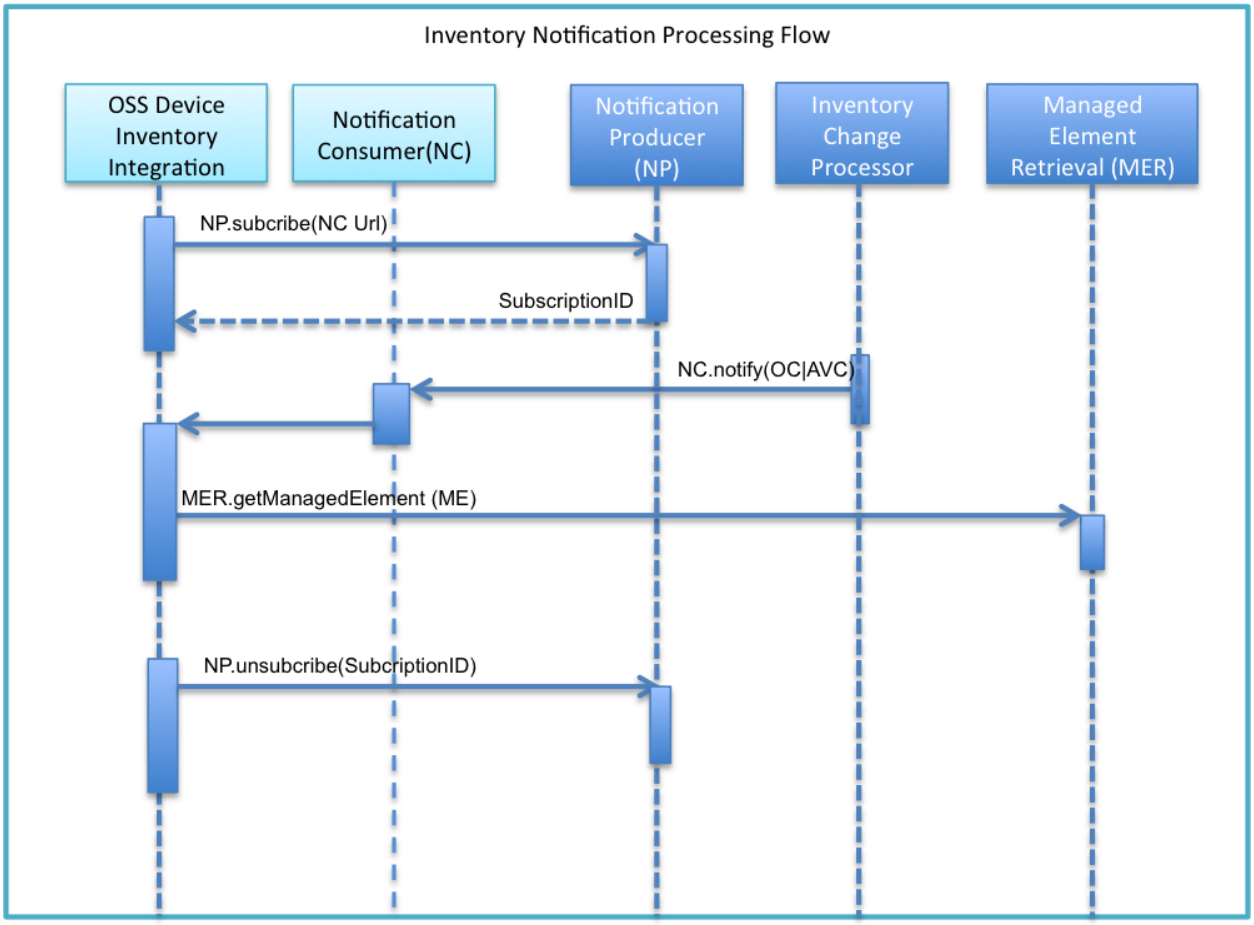
2.5.1 Retrieving Device Inventory Flow

The following sequence flow illustrates how MTOSI Web services operations may be invoked to retrieve the device inventory from Cisco EPN Manager for integration purposes.



2.5.2 Inventory Notification Registration and Processing Flow

The following sequence flow illustrates how MTOSI Web services operations may be invoked to subscribe to Cisco EPN Manager notifications. The sequence flow also illustrates how the retrieved device inventory is processed for integration purposes.



Note: By default, the Notification engine on Cisco EPN Manager's NBI is disabled. In order to receive notifications you need to enable the Notification engine as follows:

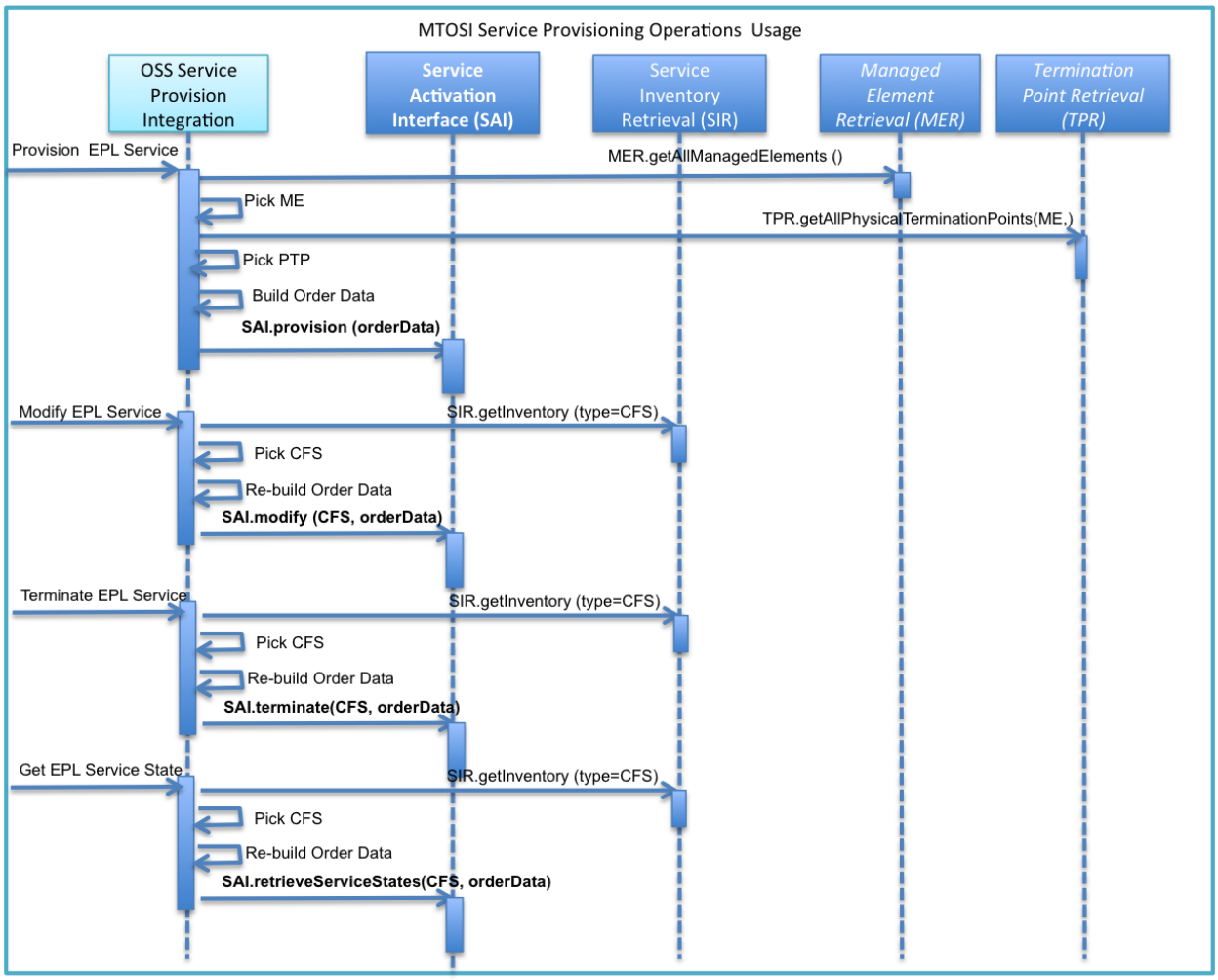
Edit file **/opt/CSCOlumos/conf/mtosi/mtosi-config.properties** and set the "**nbi.tqscanner.enabled**" to "**true**".

```
nbi.tqscanner.enabled=true
```

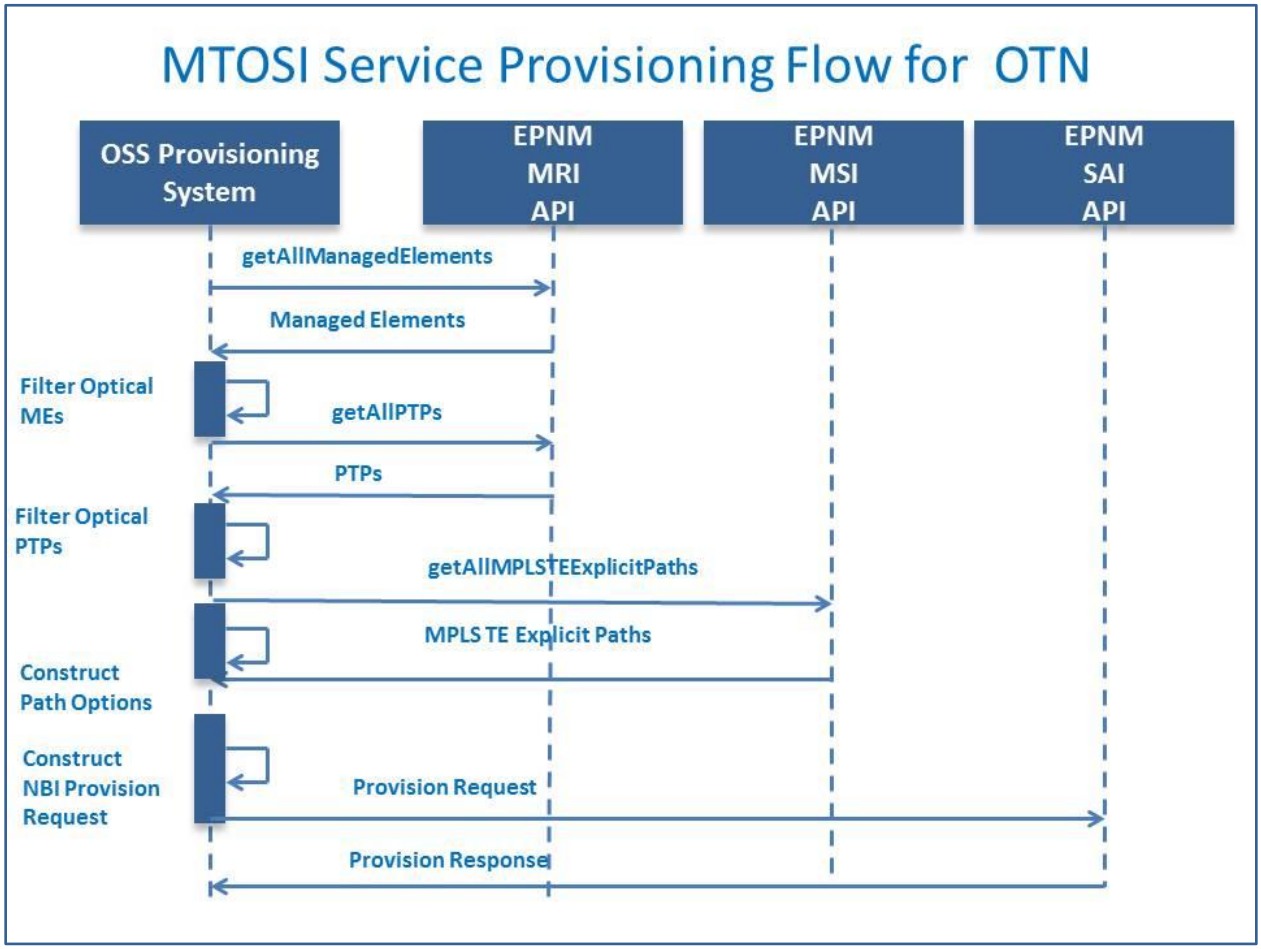
2.5.3 Service Provisioning Flow

The following sequence flow illustrates how MTOSI Web services operations may be invoked to provision supported Optical and Carrier Ethernet services in Cisco EPN Manager for OSS client integration.

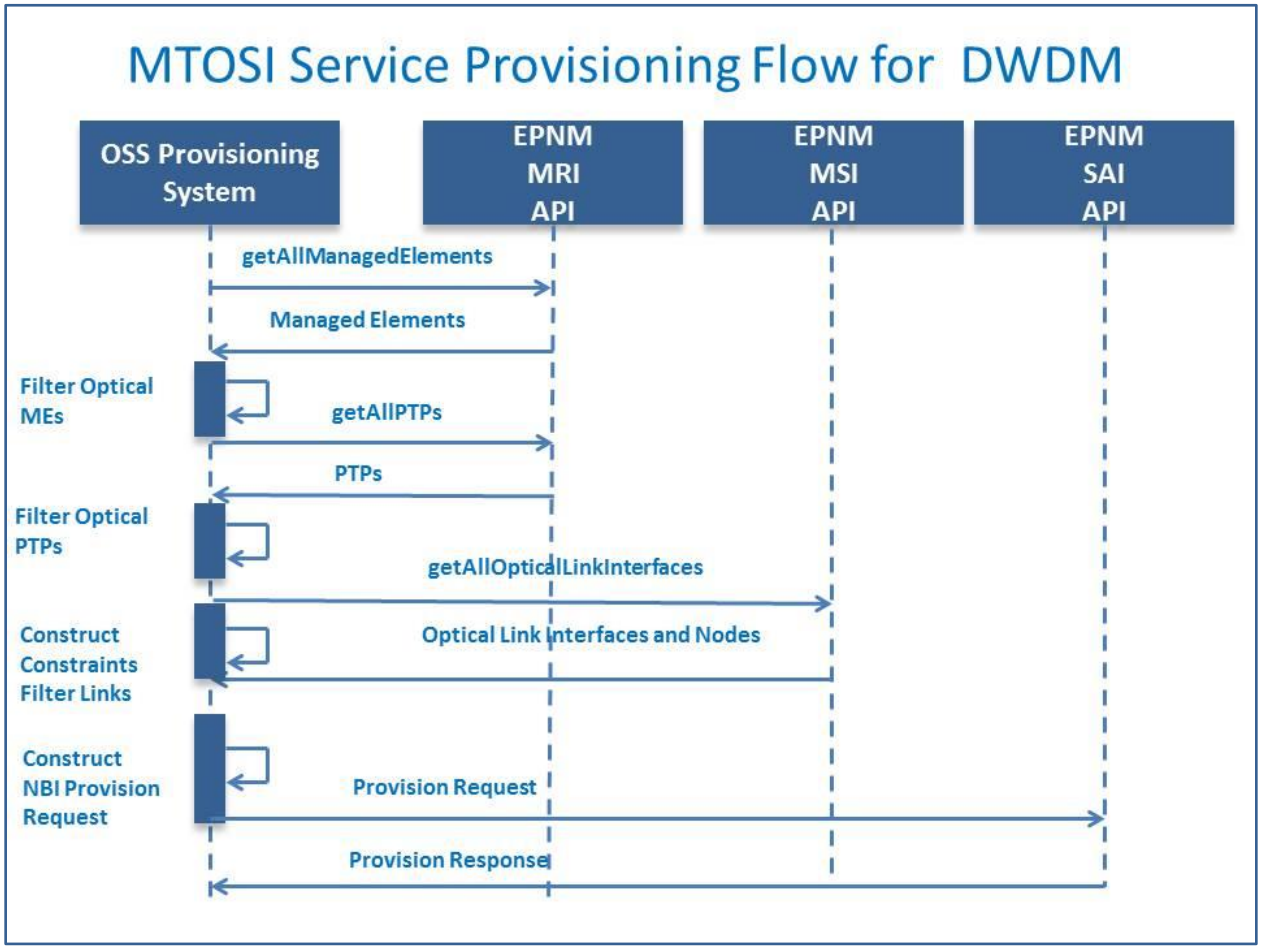
2.5.3.1 *Service Provisioning Flow for Carrier Ethernet*



2.5.3.2 *Service Provisioning Flow for Optical (OTN) Services*



2.5.3.3 *Service Provisioning Flow for Optical (DWDM) Services*



3 Supported MTOSI Interfaces

The following table lists the MTOSI interfaces and associated operations supported in the Cisco EPN Manager implementation.

Table - Supported MTOSI Interfaces

Interface Name	Operation Name	Cisco Extension
ManagedElementRetrieval	getAllManagedElements	
	getAllManagedElementsIterator	
	getManagedElement	
ManagedElementNamesRetrieval	getAllManagedElementNames	Y
	getAllManagedElementNamesIterator	Y
EquipmentInventoryRetrieval	getAllEquipment	
	getAllEquipmentIterator	
	getEquipment	
	getContainedEquipment	
TerminationPointRetrieval	getAllPhysicalTerminationPoints	
	getTerminationPointsIterator	
	getTerminationPoint	
	getAllFloatingTerminationPoints	
	getContainedInUseConnectionTerminationPoints	
ConnectionRetrieval	getAllSubnetworkConnections	
	getSubnetworkConnectionsIterator	
	getSubnetworkConnection	
	getAllCrossConnections	
	getRoute	
	getAllSubnetworkConnectionsWithTP	
FlowDomainRetrieval	getAllFlowDomainFragments	
	getAllFlowDomainsIterator	
	getFlowDomainFragment	
	getFlowDomainFragmentRoute	
FlowDomainFragmentNameRetrieval	getAllFlowDomainFragmentNames	Y
	getFlowDomainFragmentNamesIterator	
TopologicalLinkRetrieval	getAllTopologicalLinks	
	getTopologicalLinksIterator	
	getTopologicalLink	
	getRouteAndTopologicalLinks	
ServiceInventoryRetrieval	getServiceInventory	
	getServiceInventoryIterator	
CustomerNameRetrieval	getAllCustomerNames	Y
	getCustomerNamesIterator	Y
QosProfileNameRetrieval	getAllQosProfileNames	Y
	getQosProfileNamesIterator	Y
OpticalLinkInterfaceRetrieval	getAllOpticalLinkInterfaces	Y
	getAllOpticalLinkInterfacesIterator	Y
ServiceActivationInterface	provision	
	modify	
	terminate	

Interface Name	Operation Name	Cisco Extension
	retrieveServiceStates	
	activate	
	deActivate	
NotificationConsumer	notify	
NotificationProducer	subscribe	
	unsubscribe	
ConnectionControl	switchRoute	
	setIntendedRoute	
TerminationPointControl	setTerminationPointData	
ProtectionProfileRetrieval	getAllProtectionProfiles	Y
	getProtectionProfile	Y
	getAllSubnetworkConnectionsWithProtectionProfile	Y
ProtectionProfileControl	createProtectionProfile	Y
	modifyProtectionProfile	Y
	deleteProtectionProfile	Y
MPLSTEExplicitPathRetrieval	getAllMPLSTEExplicitPaths	Y
	getMPLSTEExplicitPath	Y
	getAllSubnetworkConnectionsWithExplicitPath	Y
MPLSTEExplicitPathControl	createMPLSTEExplicitPath	Y
	modifyMPLSTEExplicitPath	Y
	deleteMPLSTEExplicitPath	Y
AlarmHandling	acknowledgeAlarms	
	unacknowledgeAlarms	
AlarmRetrieval	getActiveAlarms	Y
	getActiveAlarmsCount	
	getActiveAlarmsIterator	Y

3.1 MTOSI Interface Endpoints

The following table lists the endpoint URLs that can be used to access the supported MTOSI Web Services in Cisco EPN Manager.

MTOSI Web Service Endpoint URL	Description
https://<host>/mtosi/nbi/v1/mri/ManagedElementNameRetrieval	Provide operations to retrieve ManagedElement names.
https://<host>/mtosi/nbi/v1/mri/ManagedElementRetrieval	Provide operations to retrieve ManagedElement.
https://<host>/mtosi/nbi/v1/mri/EquipmentInventoryRetrieval	Provide operations to retrieve Equipment.
https://<host>/mtosi/nbi/v1/mri/TerminationPointRetrieval	Provide operations to retrieve terminationPoint related data.
https://<host>/mtosi/nbi/v1/mri/ConnectionRetrieval	Provide operations to retrieve subnetwork and route related data.
https://<host>/mtosi/nbi/v1/mri/FlowDomainFragmentNameRetrieval	Provide operations to retrieve Flow Domain Fragment Names.

MTOSI Web Service Endpoint URL	Description
https://<host>/mtosi/nbi/v1/mri/FlowDomainRetrieval	Provide operations to retrieve Flow Domain related data such as FDFR. FDFR Route consists of a list of MFDFr.
https://<host>/mtosi/nbi/v1/mri/TopologicalLinkRetrieval	Provide operations to retrieve topological link related data.
https://<host>/mtosi/nbi/v1/msi/ServiceInventoryRetrieval	Provide operations to retrieve service inventory data.
https://<host>/mtosi/nbi/v1/msi/CustomerNameRetrieval	Provide operations to retrieve customer data.
https://<host>/mtosi/nbi/v1/msi/QosProfileNameRetrieval	Provide operations to retrieve QoS Profile data.
https://<host>/mtosi/nbi/v1/msi/OpticalLinkInterfaceRetrieval	Provide operations to retrieve Optical link interface data.
https://<host>/mtosi/nbi/v1/sa/ServiceActivation	Provide operations to handle provisioning and activation of a service.
https://<host>/mtosi/nbi/v1/notif/NotificationConsumer	Provide operations related to notification consumer.
https://<host>/mtosi/nbi/v1/notif/Notification	Provide operations related to notification producer.
https://<host>/mtosi/nbi/v1/mrp/ConnectionControl	Provides operations to modify subnetwork connection
https://<host>/mtosi/nbi/v1/mrp/TerminationPointControl	Provides operations to modify Termination Point Data
https://<host>/mtosi/nbi/v1/rtm/AlarmHandling	Provide operations related to Alarm Handling (ack/unack).
https://<host>/mtosi/nbi/v1/rtm/AlarmRetrieval	Provides operations to retrieve active alarms.
https://<host>/mtosi/nbi/v1/mrp/MPLSTEExplicitPathControl	Provides operations to handle life cycle methods for MPLS TE Explicit Path (creation, modification, deletion)
https://<host>/mtosi/nbi/v1/msi/MPLSTEExplicitPathRetrieval	Provides operations to retrieve MPLS TE Explicit Path(s)
https://<host>/mtosi/nbi/v1/mrp/ProtectionProfileControl	Provides operations to handle life cycle methods for Protection Profile (creation, modification, deletion)
https://<host>/mtosi/nbi/v1/msi/ProtectionProfileRetrieval	Provides operations to retrieve Protection Profile(s)

3.1.1 Authentication

The MTOSI endpoints in Cisco EPN Manager are secured. To access these endpoints, use basic HTTP authentication.

3.1.2 Authorization

User credentials passed for accessing the MTOSI endpoints require authorization to use the API. This authorization can be configured using Cisco EPN Manager's security management interface. In Cisco EPN Manager, NBI Read privileges are required to access all retrieval MTOSI interfaces, whereas to use the provisioning MTOSI interface you need NBI Write privileges.

3.1.3 License

A Cisco EPN Manager MTOSI license is required to use MTOSI interface endpoints.

4 MTOSI Interface Details

This section provides details about supported MTOSI interfaces.

4.1 ManagedElementRetrieval

This interface provides the operations required to retrieve Managed Element details. These operations return the Managed Element details in the form of a single Managed Element or in the form of batches (list) of Managed Elements.

4.1.1 Managed Element Data

The following table lists the Managed Element data that can be retrieved by the interface.

Managed Element Data	Data Type	Description
me	ManagedElementType	Holder element that contains the data given below for the managed element.
name (Object Id)	NamingAttributeType	List of RDNs containing the MD and ME.
userLabel	String	Managed Element Name.
discoveredName	String	Managed Element Name.
owner	String	Syscontact of Managed Element.
location	String	Syslocation of Managed Element.
manufacturer	String	Product Vendor of Managed Element.
product name	String	Product Type of Managed Element.
softwareVersion	String	Software Version of Managed Element.
isInSyncState	Boolean	Indicates data is synchronized with the current NE data.
communicationState	CommunicationStateType	Communication state of Managed Element.

resourceState	ResourceStateType	Lifecycle state of Managed Element. Value is a "VENDOR_EXT" with the attribute "extension" Represents the current management state of the network element: managed, unmanaged, under maintenance, and so forth. This state is modified by events in the network and network management system, and also by user request. Value is set to "VENDOR_EXT" with the attribute "extension" values set to one of the following: UNKNOWN ADDED_INITIALSTATE MANAGED_BUT_NEVERSYNCHRONIZED MANAGED_AND_SYNCHRONIZED MANAGED_BUT_OUTOFSYNC MANAGED_BUT_LOSSOFCONNECTIVITY PREPROVISIONED UNMANAGED INSERVICE_MAINTENANCE MANAGED_BUT_INCOMPLETE MANAGED_BUT_AGENTSHUTTINGDOWN MANAGED_PREPARINGFORMAINTENANCE MANAGED_BUT_DUPLICATE MANAGED_BUT_CONFLICTINGCREDENTIALS MANAGED_BUT_SYNCHRONIZING UNMANAGED_UNLICENSED
VendorExtensions		Contains Cisco specific Vendor Extensions.
ciscoManagedElementExtension	CiscoManaged Element ExtensionType	Holder to contain the following Cisco specific Managed Element attributes.
networkElementId	String	ID of the Network Element.
description	String	Description.
managementAddress	String	IP address of the device. This is the preferred management access address for the device. This is typically an address at which SNMP, Telnet, and SSH agents are available.
lastBootTime	DateTime	Last boot time.
creationTime	DateTime	Timestamp when the instance of the device was created
collectionTime	DateTime	Time of inventory collection.
collectionStatus	String	Status of the inventory collection.
sysObjectId	String	System object ID of the ME.
sysUpTime	String	Up time.
productVendor	String	Vendor.
productSeries	String	Product series.
productFamily	String	Product family of this device.
softwareFamily	String	Software family.
softwareType	String	A string that identifies the specific type of software that is installed. For example, Cisco IOS or Linux.

satelliteCount	int	Set to the number of satellites that this managed element manages.
clusterCount	int	Set to number of cluster nodes this managed element manages.

4.1.2 Operations

4.1.2.1 *getAllManagedElements*

This operation retrieves all Managed Element instances present in the network.

4.1.2.1.1 Input

Request Parameter	Data Type	Description
requestedBatchSize	integer	Maximum number of objects to return.
getAllManagedElementsRequest	getAllManagedElementsRequest	Empty Request Element representing the request.

4.1.2.1.2 Output

Response data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getAllManagedElementsResponse	MultipleMeObjectsResponseType	Holder for containing the list of Managed Elements returned.
meList	ManagedElementListType	List of Managed Elements. See Managed Element Data above for details.

4.1.2.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.1.2.2 *getAllManagedElementsIterator*

This operation retrieves information about a Managed Element.

4.1.2.2.1 Input

Request Parameter	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve next batch of Managed Elements. Note: This information is set on the request message on the MTOSI header part.
getManagedElementsIteratorRequest	GetAllDataIteratorRequestType	Empty element representing the iterator request.

4.1.2.2.2 Output

Response data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.

Response data	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getManagedElementsIteratorResponse	MultipleMeObjectsResponseType	Holder for containing the list of Managed Elements returned.
meList	ManagedElementListType	List of Managed Elements. See Managed Element Data above for details.

4.1.2.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.1.2.3 *getManagedElement*

This operation retrieves details about a specified Managed Element instance.

4.1.2.3.1 Input

Request Parameter	Data Type	Description
meRef	NamingAttributeType	List of RDNs that represent the Managed Element Object Id (FDN). Example RDNs that constitute ME Object Id: {type=MD, value=CISCO_MLM, type=ME, value=<me name>}

4.1.2.3.2 Output

Response Data	Data Type	Description
getManagedElementResponse	SingleMeObjectResponseType	Holder for response that contains the single Managed Element details.
me	ManagedElementType	Managed Element details. See Managed Element Data for details of the data returned.

4.1.2.3.3 Exceptions

internalError: Any internal error or exception occurring as part of this call
invalidInput: If an invalid input is given to the operation

4.2 ManagedElementNameRetrieval

This interface provides operations that retrieve Managed Element Names.

4.2.1.1 *getAllManagedElementNames*

This operation retrieves the list of Managed Element Names.

4.2.1.1.1 Input

Request Parameter	Data Type	Description
getAllManagedElementNamesRequest	getAllManagedElementNamesRequest	Element representing the request. MTOSI request headers batch size that controls how much data will be returned.

4.2.1.1.2 Output

Response Data	Data Type	Description

Response Data	Data Type	Description
getAllManagedElementNamesResponse	getAllManagedElementNamesResponse	The response containing the list of Managed Element Names. Each contains elements mentioned below.
meNameList	MENameListType	List to hold the meName.
meName	MENameType	This element contains the details given below.
name (Object Id)	NamingAttributeType	List of RDNs containing the MD and ME.
discoveredName	String	Name of Managed Element.

4.2.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.2.1.2 *getManagedElementNamesIterator*

This operation retrieves the handle to the Iterator which can be used to retrieve the list of managed Element Names.

4.2.1.2.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve next batch of managed elements. **Note:** This information is set on the request message on the MTOSI header part.
getManagedElementNamesIteratorRequest	getManagedElementNamesIteratorRequestType	Empty element representing the iterator request

4.2.1.2.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	Boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getManagedElementNamesIteratorResponse	getManagedElementNamesIteratorResponseType	Holder to contain the list of Managed Element Names. The details for each Managed Element Name are same as in the response received from the getAllManagedElementNames operation.

4.2.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.3 EquipmentInventoryRetrieval

This interface provides operations that retrieve details for a single or batch of equipment.

4.3.1 Equipment Data

The following table lists the Equipment data can be returned by the interface.

Equipment Data	Data Type	Description
Eq or Eh	EquipmentType or EquipmentHolderType	Holder element to provide details of the equipment. The details contained in the holders are listed in the following rows.
name (Object Id)	NamingAttributeType	Set of RDN types holding the information about the object ID of the equipment or equipment holder. It consists of MD, ME, EQ/EH RDN types.
resourceState	Boolean	Operational state of the equipment.
expectedEquipmentObjectType	String	Expected equipment object type of particular equipment.
installedEquipmentObjectType	String	Equipment type of particular equipment.
installedPartNumber	String	Part number of particular equipment.
installedSerialNumber	String	Serial number of particular equipment.
resourceFulfillmentState	String	Service state of particular equipment.
installedVersion	String	Hardware version of particular equipment.
manufacturer	String	Manufacturer of a particular equipment.
VendorExtensions		Contains Cisco specific vendor extensions
ciscoEquipmentExtension	ciscoEquipmentExtensionType	Holder to contain the following Cisco specific EquipmentExtension elements.
description	String	Description.
assemblyNumber	String	Manufacturing assembly number, which is the “hardware'” identification.
assemblyRevision	String	Revision of the equipment within the assembly number.
isFRUable	String	Indicates whether this physical entity is considered a “field replaceable unit” by the vendor.
entPhysicalIndex	String	Physical index of equipment.
entPhysicalContainedIn	String	Physical index of equipment/holder containing this equipment.
productName	String	Official name given to product (for example, Cisco 10720 Router or Cisco 10720, Cisco 12000 Series Six-Port DS3 Line Card or 6-Port DS3).
productId	String	Vendor-specific model name identifier string associated with physical component.
productFamily	String	Product group name, derived from common product platform (for example, Catalyst 4000, and MDS 900).
deviationNumber	String	Revision number (signifying a minor deviation) of module, port adapter, etc.
udi	String	Universal Device Identifier. UDI consists of the following concatenated values: PID = Equipment.partNumber VID = Equipment.hardwareVersion SN = Equipment.serialNumber

Equipment Data	Data Type	Description
administrativeStateCode	String	Administrative state of equipment (for example, locked, unlocked, and so on).
satellite	CiscoSatelliteExtensionType	Satellite extension attributes.
type	String	Type of satellite extension shelf (ASR9000V / ASR901 / ASR903 / CPT).
macAddress	String	Satellite MAC address.
controlStatus	String	Satellite control status.
vrf	String	VRF.
redundancyPriority	String	Redundancy priority.
satelliteId	String	Satellite ID.
ipAddress	String	Satellite IP address.
softwareCompatibility	String	Software compatibility.
availableSoftwareVersion	String	Available software version.
rommonVersion	String	ROMMON version.
fpgaVersion	String	FPGA version.
serialNumber	String	Satellite serial number.
owningHostId	String	Owning host ID.
remoteHostId	String	Remote host ID.
activeHostRef	String	Active Host Ref.
standbyHostRef	String	Standby Host Ref.
hostRedundancyStatus	String	Host redundancy status.

4.3.2 Operations

4.3.2.1 *getEquipment*

This operation retrieves information about a specified equipment instance.

4.3.2.1.1 Input

Request Parameter	Data Type	Description
equipmentOrEhRef	NamingAttributeType	Set of RDNs representing equipment or equipment holder for which data is being retrieved.

4.3.2.1.2 Output

Response Data	Data Type	Description
equipmentOrEhList	EquipmentOrEquipmentHolderType	Holder that contains the Eq or Eh details. See equipment details table for data returns for each equipment.

4.3.2.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.3.2.2 *getAllEquipment*

This operation retrieves complete information about all equipment instances in the network.

4.3.2.2.1 Input

Request Parameter	Data Type	Description
requestedBatchSize	integer	Maximum number of objects to return.
getAllEquipmentRequest	getAllEquipmentRequest	Request element. May contain additional granularity input, or may be empty while returning every equipment in system.
meOrEhRef	NamingAttributeType	Set of RDNs representing the managed element or equipment holder in which the equipment is to be found.

4.3.2.2.2 Output

Response Data	Data Type	Description
getAllEquipmentResponse	getAllEquipmentResponseType	Holder element that contains the list of equipment or equipment holders. Data representing each object (equipment or equipment holder) is defined in equipment data table (in interface section).

4.3.2.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.3.2.3 *getEquipmentIterator*

This operation returns Equipment information in batches.

4.3.2.3.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve next batch of equipment. **Note:** This information is set on the request message on the MTOSI header part.

4.3.2.3.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getEquipmentIteratorResponse	EquipmentOrEquipmentHolderListType	Holder for containing list of equipment details. For equipment details, see the equipment data table above.

4.3.2.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.3.2.4 *getContainedEquipment*

This operation retrieves information about a specified contained equipment.

4.3.2.4.1 Input

Request Parameter	Data Type	Description
ehRef	NamingAttributeType	Set of RDN types representing the equipment holder in which to find the equipment.

4.3.2.4.2 Output

Response Data	Data Type	Description
getContainedEquipmentResponse	getContainedEquipmentResponse	Holder that contains list of equipment contained in equipment holder specified in the input.

4.3.2.4.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.4 TerminationPointRetrieval

This interface provides operations that retrieve information for a single or batch of Termination Points (TPs).

4.4.1 Termination Point Data

The following table lists the Termination Point data that can be retrieved by the interface.

Termination Point Data	Data Type	Description
tp	TerminationPointType	Holder for the data returned for a termination point. (Details of data provided in the following rows of this table).
name (Object Id)	NamingAttributeType	Set of RDN types representing the TP; consists of MD, ME, and PTP RDNs.
discoveredName	String	Discovered name.
resourceState	String	PTP lifecycle state. Lifecycle state of Termination Point. Value is a UP or DOWN or “VENDOR_EXT” with the attribute “extension” Represents the current management state of the termination point: This state is modified by events in the network and network management system, and also by user request. Value is set to “VENDOR_EXT” with the attribute “extension” values set to one of the following: TESTING UNKNOWN DORMANT NOTPRESENT LOWERLAYERRATE
VendorExtensions	AnyListType	Cisco-specific vendor extensions
ciscoPtpExtension	CiscoPtpExtensionType	Holder to contain following Cisco-specific TP attributes.
ptpId	String	TP ID.
Name	String	Name.
Description	String	TP description.

Termination Point Data	Data Type	Description
type	String	Type.
ifSpeed	String	Interface speed.
isPromiscuous	boolean	Is promiscuous.
isConnectorPresent	boolean	Whether or not a physical connector exists.
adminStatus	String	Admin status.
operStatus	String	Operational status (up or down).
supportedMTUs	String	Supported MTUs.
Mtu	Long	MTU.
lagEndName	String	LAG end name.
entAliasMappingIdentifier	String	TP alias name.
isSpamMonitored	boolean	Whether spam is monitored.
isFloatingPep	Boolean	Whether floating point is checked or not.
ifIndex	Boolean	IfIndex
isTrapEnabled	Boolean	Whether trap is enabled or not.
alarmStatus	String	Alarm status
locationIndex	Long	Location index
satelliteSettings	SatelliteSettingsType	Satellite PTP settings
owningSatelliteId	String	ID of owning satellite.

In addition to the parameters mentioned as part of the VendorExtension, the table below gives the list of additional attributes that are supported.

Supported Parameters:

Parameter Name	Data Type	Description
AdminStatus		Parameters for Admin Status
adminState	ENUM	UP, DOWN, TESTING
LoopBack		Parameters for Loop Back
loopBack	ENUM	NO_LOOPBACK, OTHER, INTERNAL, LINE, DROP
ALS (Automatic Laser Shutdown)		Parameters for Automatic Lazer Shutdown
alsMode	ENUM,	DISABLED, AUTO, MANUAL_RESTART,MANUAL_RESTART_FOR_TEST
alsRecoveryPulseWidth	Float	Value Ranging from 2.0 to 100.0
alsRecoveryInterval	Float	Value Ranging from 60 to 100
OTN PEP Settings		Parameters for OTN Protocol Endpoint
fec	ENUM	ENHANCED, ENHANCED_HG20, ENHANCED_HG7, ENHANCED_I_4, ENHANCED_I_7, ENHANCED_SWIZZLE, STANDARD, NODE, SD_20
payloadmap	ENUM	ASYNC, NOOPU2FIXEDSTUFF, NOTAPPLICABLE, ODU, SYNC
admssm	ENUM	DUS, PRS, RES, SMC, ST2, ST3, ST3E, ST4, STU, TNC, G811, G812T, G812L, SETS
syncmsg	Boolean	true, false
g709	Boolean	true.false
sdber	ENUM	E_3, E4, E_5, D_6, E_7, E_8. E_9,
gcc0	Boolean	true, false
ttiSapiSent	String	Free format String
ttiDapiSent	String	Free format String

ttiOperatorSent	String	Free format String
ttiSapiExpected	String	Free format String
ttiDapiExpected	String	Free format String
ttiOperatorExpected	String	Free format String
trcLevel	String	J0, TTI-SM, TTI-PM
trcMode	String	AUTO, AUTO-NO-AIS, MAN, MAN-NO-AIS,OFF
EthernetFlowControl Params(s)		Parameters for Ethernet Flow Control
flowControl	ENUM	BIDIRECTIONAL, EGRESS, INGRESS
SONET / SDH Param(s)		Parameters for SONET / SDH
sonetXmtClockSource	ENUM	LOOP_TIMING, LOCAL_TIMING, LINE_TIMING, INTERNAL_TIMING
WaveLength Param(s)		Parameters for Wavelength Setting
wavelength	Float	
Optics Payload Param(s)		Parameters required for Opitcal Payload
portMode	ENUM	ETHERNET, FC, OTN,SDH, SONET,BREAKOUT
framing	ENUM	OPYU0, OPU1, OPU1E, OPU2, OPU3, OPU3E1,OPU3E2, OPU4, OPU4FLEX, OPUFlex, OPU1F, OPU2F, NONE
mapping	ENUM	BMP, GMP, GFPF, GFPT, WIS. HDLC. HDLC_LEX, HDLC_X86, CBR, TRP, NONE
rate	ENUM	OC3, OC12, OC48, OC192, STM1, STM4, STM16, STM64, NONE
bitRate	Long	-
ODU Param(s)		Parameters for ODU
gcc	String	-
tsG	String	-
ttiSent	String	-
ttiSapiSent	String	-
ttiDapiSent	String	-
ttiOperatorSent	String	-
ttiSapiExpected	String	-
ttiDapiExpected	String	-
ttiOperatorExpected	String	-
ttiExpected	String	-
ODU Channelization		Parameters required to create ODU Channels
channelize_ODU	Boolean	Optional attribute should be set to 'True' for creating the channel and 'false' for removing ODU Channel
ODU_channel	String	Channel values eg: /ODU/0/1/2
oduLayer	ENUM	Possible values: ODU0, ODU1, ODU2, ODU-FLEX, ODU1E, ODU2E, ODU2F, ODU3, ODU3E1, ODU3E2
tpn	NUMBER	Tributary Port Number, Possible Values: 1-80
tps	String	Tributary Slots, Tributary slot string separated by (:) or (-) from 1 to no of Time Slots in Parent ODU controller. Eg: 3:4
TTi		
traceLevel	String	Allowed Values • J0 • TTI-SM • TTI-PM

traceMode	String	Allowed Values • AUTO • AUTO-NO-AIS • MAN • MAN-NO-AIS • OFF
ttiExpected	String	Free format
ttiSent	String	Free format
breakoutModeSettings		
laneNumber	Integer	1 to 10
portMode	String	One of the following values: ETHERNET, FC, OTN,SDH, SONET, NONE
framingType	String	One of the following values: OPYU0, OPU1, OPU1E, OPU2, OPU3, OPU3E1,OPU3E2, OPU4, OPU4FLEX, OPUFlex, OPU1F, OPU2F, NONE
mappingMode	String	One of the following values: BMP, GMP, GFPF, GFPT, WIS. HDLC. HDLC_LEX, HDLC_X86, CBR, TRP, NONE
rate	String	One of the following values: OC3, OC12, OC48, OC192, STM1, STM4, STM16, STM64, NONE
bitrate	Long	-
OpticalMplsTeNniSettings		
ttiMode	String	TTI Mode – one of the following values SM, PM, TCM_1, TCM_2, TCM_3, TCM_4, TCM_5, TCM_6
adminWeight	String	<0-65535> Admin weight value
topology	String	The name of the owning topology
areaId	String	Area id

4.4.2 Operations

4.4.2.1 *getAllPhysicalTerminationPoints*

This operation retrieves a list of physical termination points for the managed element.

4.4.2.1.1 Input

Request parameter	Data Type	Description
requestedBatchSize	Integer	Maximum number of objects to return.
meRef	NamingAttributeType	Set of RDN types representing the managed element for which the PTPs will be retrieved.

4.4.2.1.2 Output

Response parameter	Data Type	Description
getAllPhysicalTerminationPointsResponse	MultipleTerminationPointObjectsResponseType	Response element to hold the list of TP details. See Termination Point Data table for the data returned for each one.

4.4.2.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.4.2.2 *getTerminationPointsIterator*

This operation returns termination point information in batches.

4.4.2.2.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URL which must be present to retrieve next batch of TPs. **Note:** This information is set on the request message on the MTOSI header part.

4.4.2.2.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URL which can be used to retrieve the next batch.
getTerminationPointResponse	MultipleTerminationPointObjectsResponseType	Holder for containing the list of TPs. See Termination Point Data table for details of the data contained in each TP.

4.4.2.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.4.2.3 *getTerminationPoint*

This operation retrieves information about a specified termination point. The output returns information about the physical termination points present inside the equipment.

4.4.2.3.1 Input

Request parameter	Data Type	Description
tpRef	NamingAttributeType	Set of RDN types representing the TP object ID. Consists of MD, ME, and PTP list.

4.4.2.3.2 Output

Response Data	Data Type	Description
getTerminationPointResponse	SingleTerminationPointObjectResponseType	Details of specified PTP. See WSDL Document Reference appendix for details.
tp	TerminationPointType	Contains data for TP. See Termination Point Data table for details.

4.4.2.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.4.2.4 *getAllFloatingTerminationPoints*

This operation retrieves a list of floating termination points for the managed element.

4.4.2.4.1 Input

Request parameter	Data Type	Description

Request parameter	Data Type	Description
requestedBatchSize	integer	Maximum number of objects to return.
meRef	NamingAttributeType	Set of RDN types representing the managed element for which the FTPs will be retrieved.

4.4.2.4.2 Output

Response parameter	Data Type	Description
getAllFloatingTerminationPointsResponse	MultipleTerminationPointObjectsResponseType	Response element to hold the list of TP details. See Termination Point Data table for the data returned for each one.

4.4.2.4.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.4.2.5 *getAllSupportedPhysicalTerminationPoints*

This operation retrieves a list of physical termination points for the equipment.

4.4.2.5.1 Input

Request parameter	Data Type	Description
requestedBatchSize	integer	Maximum number of objects to return.
equipmentRef	NamingAttributeType	Set of RDN types representing the equipment element for which the PTPs will be retrieved.

4.4.2.5.2 Output

Response parameter	Data Type	Description
getAllSupportedPhysicalTerminationPointsResponse	MultipleTerminationPointObjectsResponseType	Response element to hold the list of TP details. See Termination Point Data table for the data returned for each one.

4.4.2.5.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.4.2.6 *getContainedInUseConnectionTerminationPoints*

This operation retrieves a list of already used contained connection termination points for the Physical Termination Point. Used Connected Termination Points are associated with Subnetwork Connection and not available to use for other Subnetwork Connection.

4.4.2.6.1 Input

Request parameter	Data Type	Description
requestedBatchSize	integer	Maximum number of objects to return.
getAllConnectionTerminationPointsType	GetAllConnectionTerminationPointsType	Complex Data Type containing tpRef and LayerRate.
tpRef	NamingAttribute	Set of RDNs representing the FDN containing MD, ME, and PTP.
layerRateList	LayerRateListType	List of Layer Rate Enums supported for the PTP.

4.4.2.6.2 Output

Response parameter	Data Type	Description
getContainedCurrentConnectionTerminationPointsResponse	MultipleTerminationPointObjectsResponseType	Response element to hold the list of TP details. See Termination Point Data table for the data returned for each one.

4.4.2.6.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.4.2.7 *getContainedPotentialConnectionTerminationPoints*

This operation returns a list of all the hierarchical Termination Points (PTP/CTP/FTP) for a given Termination Point RDN.

4.4.2.7.1 Input

Request parameter	Data Type	Description
requestedBatchSize	integer	Maximum number of objects to return.
getContainedPotentialConnectionTerminationPointsRequest	GetAllConnectionTerminationPointsType	Complex Data Type containing tpRef and LayerRate.
tpRef	NamingAttribute	Set of RDNs representing the FDN containing MD, ME, and TP.

4.4.2.7.2 Output

Response parameter	Data Type	Description
getContainedPotentialConnectionTerminationPointsResponse	MultipleTerminationPointObjectsResponseType	Response element to hold the list of TP details. See Termination Point Data table for the data returned for each one.

4.4.2.7.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.5 ConnectionRetrieval (Optical Domain)

This section describes the operations supported by the ConnectionRetrieval interface for the Optical Inventory.

4.5.1.1 *getAllsubnetworkConnection*

This operation retrieves complete information about all subnetwork connections present in Cisco EPN Manager.

4.5.1.1.1 Input

Request parameter	Data Type	Description
getAllSubnetworkConnectionRequest	NamingAttributeType	Managed domain name. Name=MD, value=CISCO_EPNM.

4.5.1.1.2 Output

Response parameter	Data Type	Description
getAllSubnetworkConnectionsResponse	getAllSubnetworkConnectionsResponse	Detailed information about the queried SNC. For details on the attributes, refer to NetworkResourceFullfilment/IIS/xsd/snc.xsd
SNC FDN	String	The MD and SNC RDN. MD= CISCO_EPNM; SNC= Sub-networkConnection Name.
direction	String	Direction of sub-network connection.
userLabel	String	Name of sub-network connection.
discoveredName	String	Name of sub-network connection.
connectionSetUpType	String	Contains information of Connection type of Subnetwork
correlationIdentifier	String	circuitId of SubnetworkConnection. Contains information about relationships that SNC may have to other managed objects.
layerRate	String	Rate of sub-network connection, obtained by reading this attribute. The target OS sets this attribute at creation of the SNC.
aEndTpDataList	tpData	List of Aend TPs where this SNC terminates. TPname provides the name of the CTP/FTP/GTP in a non-control plane SNC.
zEndTpDataList	tpData	List of Zend TPs where this SNC terminates. The TPname provides the name of the CTP/FTP/GTP in a non-control plane SNC.

Response parameter	Data Type	Description
VendorExtensions	VendorExtension	ciscoSubnetworkConnectionExtension, which contains the following attributes: **adminState :** It defines possible values for the administrative state of the interface. The possible values are: • UP • DOWN • TESTING **circuitId :** It defines the discovered name of the associated circuit. **operStatus:** It defines values for the operational status of the interface. The possible values are: • UP • DOWN • TESTING • UNKNOWN • DORMANT • NOTPRESENT • LOWERLAYERDOW **direction:** It defines possible traffic flow directions for a Forwarding Relationship. The possible values are: • UNKNOWN • FORWARD • REVERSE • BOTHWAY **layerRate:** It defines the name of the different layer types of the interface. **circuitType**: The circuitType of the associated circuit. Ex: OCHCC, OCHNC, OCHTrail, ODU_Tunnel, ODU_UNI, TRAIL_UNI **diverseFromCircuitRef:** FDN reference (SNC) of a diverse from circuit **name:** The name of the discovered circuit. **serviceId:** The corresponding serviceId of the provisioned circuit.

4.5.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.

invalidInput: Indicates that the input given to the operation is invalid.

NOTE: This API will not return circuits that are created internally (implicit circuits such as ODU Tunnels that are created as part of ODU UNI).

4.5.1.2 *getSubnetworkConnection*

This operation returns details about a specified subnetwork connection.

4.5.1.2.1 Input

Request parameter	Data Type	Description
getSubnetworkConnectionRequest	NamingAttributeType	SNC information. MD= CISCO_EPNM; SNC= SubnetworkConnection_ Name.

4.5.1.2.2 Output

Response parameter	Data Type	Description
getSubnetworkConnectionResponse	getSubnetworkConnectionResponse	Detailed information about the queried SNC. For details on the attributes, refer to NetworkResourceFullfilment/IIS/xsd/snc.xsd
SNC FDN	String	MD and SNC RDN. MD=CISCO_MLM/ SNC= SubnetworkConnection_ Name
direction	String	Direction of sub-network connection.
userLabel	String	Name of sub-network connection.
discoveredName	String	Name of sub-network connection.
connectionSetUpType	String	Contains information of about the connection type of sub-network.
correlationIdentifier	String	Circuit ID of sub-network connection. Contains information about relationships that this SNC may have to other managed objects.
layerRate	String	Rate of the sub-network connection, obtained by reading this attribute. The target OS sets this attribute at creation of SNC.
aEndTpDataList	tpData	List of A-end TPs where this SNC terminates. TP name provides the name of the CTP/FTP/GTP in a non-control plane SNC.
zEndTpDataList	tpData	List of Z-end TPs where this SNC terminates. TP name provides the name of the CTP/FTP/GTP in a non-control plane SNC.

Response parameter	Data Type	Description
VendorExtensions	VendorExtension	ciscoSubnetworkConnectionExtension. Contains the following attributes: **adminState:** It defines possible values for the administrative state of the interface. The possible values are: • UP • DOWN • TESTING **circuitId:** It defines the discovered name of the associated circuit. **operStatus:** It defines values for the operational status of the interface. The possible values are: • UP • DOWN • TESTING • UNKNOWN • DORMANT • NOTPRESENT • LOWERLAYERDOW **direction:** It defines possible traffic flow directions for a Forwarding Relationship. The possible values are: • UNKNOWN • FORWARD • REVERSE • BOTHWAY **layerRate:** It defines the name of the different layer types of the interface. **circuitType**: The circuitType of the associated circuit. Ex: OCHCC, OCHNC, OCHTrail, ODU_Tunnel, ODU_UNI and TRAIL_UNI. **diverseFromCircuitRef:** FDN reference (SNC) of a diverse from circuit **name:** The name of the discovered circuit. **serviceId:** The corresponding serviceId of the provisioned circuit.

4.5.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

NOTE: This API will not return circuits that are created internally (implicit circuits such as ODU Tunnels that are created as part of ODU UNI).

4.5.1.3 *getSubnetworkConnectionsIterator*

This operation returns subnetwork connection information in batches.

4.5.1.3.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URL which can be used to retrieve next batch.

4.5.1.3.2 Output

Response parameter	Data Type	Description
getSubnetworkConnectionsIteratorResponse	getSubnetworkConnectionsIteratorResponse	Detailed information about the queried SNC. For details on the attributes, refer to NetworkResourceFullfilment/IIS/xsd/snc.xsd.
SNC FDN	String	MD and SNC RDN. MD=CISCO_EPNM; SNC= SubnetworkConnection_Name.
direction	String	Direction of sub-network connection.
userLabel	String	Name of sub-network connection.
discoveredName	String	Name of sub-network connection.
connectionSetUpType	String	Contains information about the connection type of sub-network
correlationIdentifier	String	Circuit ID of sub-network connection. Contains information about relationships that SNC may have to other managed objects.
layerRate	String	Rate of SubnetworkConnection, obtained by reading this attribute. The target OS sets this attribute at creation of SNC.
aEndTpDataList	tpData	List of A-end TPs where this SNC terminates. The TPname provides the name of the CTP/FTP/GTP in a non-control plane SNC.
zEndTpDataList	tpData	List of Z-end TPs where this SNC terminates. The TPname provides the name of the CTP/FTP/GTP in a non-control plane SNC.

Response parameter	Data Type	Description
VendorExtensions	VendorExtension	ciscoSubnetworkConnectionExtension. Contains the following attributes: **adminState :** It defines possible values for the administrative state of the interface. The possible values are: • UP • DOWN • TESTING **circuitId:** It defines the discovered name of the associated circuit. **operStatus:** It defines values for the operational status of the interface. The possible values are: • UP • DOWN • TESTING • UNKNOWN • DORMANT • NOTPRESENT • LOWERLAYERDOW **direction:** It defines possible traffic flow directions for a Forwarding Relationship. The possible values are: • UNKNOWN • FORWARD • REVERSE • BOTHWAY **layerRate:** It defines the name of the different layer types of the interface. **circuitType**: The circuitType of the associated circuit. Ex: OCHCC, OCHNC, OCHTrail, ODU_Tunnel, ODU_UNI etc. **diverseFromCircuitRef:** FDN reference (SNC) of a diverse from circuit **name:** The name of the discovered circuit. **serviceId:** The corresponding serviceId of the provisioned circuit.

4.5.1.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.5.1.4 *getRoute*

This operation retrieves information about the route for a specified subnetwork connection.

4.5.1.4.1 Input

Request parameter	Data Type	Description
getRouteRequest	NamingAttributeType	Name of the SNC. MD= CISCO_EPNM; SNC= SubnetworkConnection Name.

4.5.1.4.2 Output

Response parameter	Data Type	Description
getRouteResponse	getRouteResponse	Route details. For details on the attributes, refer to NetworkResourceFullfilment/IIS/xsd/Route.xsd
CC FDN	String	MD and SNC RDN: MD= CISCO_EPNM; CC= Cross-connect name
isActive	Boolean	Whether the cross-connect is active in the ME.
Direction	String	Direction of crossConnection.
connectionId	String	Control plane identifier. This attribute is the Connection Name attribute in G.7713. **Note:** Cross Connection points to its superior connection.
routeId	String	Unique identifier within the SNC name, with format up to the target OS.
VendorExtensions	VendorExtension	ciscoCrossConnectExtension. Contains the following attributes: adminState operStatus direction description creationTime connectionType circuitId name

4.5.1.4.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.5.1.5 *getAllCrossConnections*

This operation retrieves details about a specified route's cross-connects.

4.5.1.5.1 Input

Request parameter	Data Type	Description
geAllCrossConnectionsRequest	NamingAttributeType	Management Domain name. For example: Name=MD, value=CISCO_EPNM

4.5.1.5.2 Output

Response parameter	Data Type	Description
geAllCrossConnectionsResponse	geAllCrossConnectionsResponse	Details about cross connection for the given route. For details on the attributes, refer to NetworkResourceFullfilment/IIS/xsd/Cc.xsd

Response parameter	Data Type	Description
isActive	Boolean	Whether the cross-connect is active in the ME.
Direction	String	Direction of cross-connection.
connectionId	String	Control plane identifier. This attribute is the Connection Name attribute in G.7713. **Note:** Cross-connection points to its superior connection.
routeId	String	Unique identifier within the SNC name, with format up to the target OS.
VendorExtensions	VendorExtension	ciscoCrossConnectExtension. Contains the following attributes: adminState operStatus direction description creationTime connectionType circuitId name

4.5.1.5.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.5.1.6 *getAllSubnetworkConnectionsWithTP*

This operation retrieves a list of Subnetwork Connections associated with the specified Termination Point.

4.5.1.6.1 Input

Request parameter	Data Type	Description
getAllSubnetworkConnectionsWithTpRequest	GetSubnetworkConnectionsWithTpRequestType	Complex Request type

4.5.1.6.2 Output

Response parameter	Data Type	Description
getAllSubnetworkConnectionsWithTpResponse	MultipleSubnetworkConnectionObjectsResponseType	Details of the Subnetwork Connection for the given TP. For details refer to NetworkResourceFullfilment/IIS/xsd/snc.xsd **Note:** Please refer to the output of "getAllSubnetworkConnections" to get details of the attributes.

4.5.1.6.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.6 TopologicalLinkRetrieval

This interface enables an NMS to request all of the top-level topological links that are under the control of Cisco EPN Manager. A top-level topological link is a link in which the link endpoints exist in two different multilayer subnetworks.

4.6.1.1 *getAllTopologicalLinks*

This operation retrieves information about all topological links under the control of Cisco EPN Manager. If a topological link was removed from the NE, the provType parameter is reported as INVALID.

4.6.1.1.1 Input

Request parameter	Data Type	Description
getAllTopologicalLinksRequest	NamingAttributeType	Management Domain name. For example: Name=MD, value= CISCO_EPNM

4.6.1.1.2 Output

Response parameter	Data Type	Description
getAllTopologicalLinks Response	getAllTopologicalLinksResponse	List of topological links that exist within the specified subnetwork. For details refer to the WSDL section Tl.xsd.
TL FDN	String	MD and TL RDN: MD=CISCO_ EPNM; TL= Topological Link Name.
userLabel	String	Name of topological link.
aEndTpRefList	NamingAttributeListType	Name of A-end TP (PTP/CTP/FTP). The termination point name must be explicit.
zEndTpRefList	NamingAttributeListType	Name of Z-end TP (PTP/CTP/FTP). The termination point name must be explicit.
VendorExtensions	VendorExtension	ciscoTopologicalLinkExtension. Contains the following attributes: • name • description • directionality • layerRate

4.6.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.6.1.2 *getTopologicalLink*

This operation retrieves information about a specified topological link.

4.6.1.2.1 Input

Request parameter	Data Type	Description
getTopologicalLinkRequest	NamingAttributeType	Management Domain name. For example: Name=MD, value=CISCO_EPNM, Name=TL Value= Topological Link Name

4.6.1.2.2 Output

Response Parameter	Data Type	Description
getTopologicalLinkResponse	getTopologicalLinkResponse	List of topological links that exist within the specified subnetwork.
TL FDN	String	MD and TL RDN: MD=CISCO_EPNM;TL= Topological Link Name
userLabel	String	Name of topological link
aEndTpRefList	NamingAttributeListType	Name of A-end TP (PTP/CTP/FTP). The termination point name must be explicit.
zEndTpRefList	NamingAttributeListType	Name of Z-end TP (PTP/CTP/FTP). The termination point name must be explicit.
VendorExtensions	VendorExtension	ciscoTopologicalLinkExtension. Contains the following attributes: name description directionality layerRate

4.6.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.6.1.3 *getTopologicalLinksIterator*

This operation retrieves information about topological links in batches.

4.6.1.3.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URL which can be used to retrieve the next batch

4.6.1.3.2 Output

Response Parameter	Data Type	Description
getTopologicalLinksIteratorResponse	getTopologicalLinksIteratorResponse	Detailed information about the queried topological link. For details on the attributes, refer to NetworkResourceFullfilment/IIS/xsd/tl.xsd
TL FDN	String	MD and TL RDN: MD=CISCO_ EPNM; TL= Topological Link Name
userLabel	String	Name of topological link
aEndTpRefList	NamingAttributeListType	Name of A-end TP (PTP/CTP/FTP). The termination point name must be explicit.
zEndTpRefList	NamingAttributeListType	Name of Z-end TP (PTP/CTP/FTP). The termination point name must be explicit.

Response Parameter	Data Type	Description
VendorExtensions	VendorExtension	ciscoTopologicalLinkExtension. Contains the following attributes: • name • description • directionality • layerRate

4.6.1.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.6.1.4 *getRouteAndTopologicalLinks*

This operation retrieves information about a the Route and Topological Link for a specified Subnetwork Connection.

4.6.1.4.1 Input

Request parameter	Data Type	Description
`getRouteAndTopologicalLinksRequest`	NamingAttributeType	Management Domain name. For example: Name=MD, value=CISCO_EPNM, Name=SNC Value= Subnetwork Connection Name

4.6.1.4.2 Output

Response Parameter	Data Type	Description
`getRouteAndTopologicalLinksResponse`	getTopologicalLinkResponse	List of Route and Topological links associated with the specified subnetwork connection.
route	RouteType	Information about the Route (List of Cross Connections present for the route)
CC FDN	String	MD and SNC RDN: MD= CISCO_EPNM; CC= Cross-connect name
isActive	Boolean	Whether the cross-connect is active in the ME.
Direction	String	Direction of crossConnection.
connectionId	String	Control plane identifier. This attribute is the Connection Name attribute in G.7713. **Note:** Cross Connection points to its superior connection.
routeId	String	Unique identifier within the SNC name, with format up to the target OS.

Response Parameter	Data Type	Description
VendorExtensions	VendorExtension	ciscoCrossConnectExtension. Contains the following attributes: • adminState • operStatus • direction • description • creationTime • connectionType • circuitId • name
tlList	TopologicalLinkListType	Information about the List of Topological Links that are used by the specified Subnetwork Connection.
TL FDN	String	MD and TL RDN: MD=CISCO_EPNM;TL= Topological Link Name
userLabel	String	Name of topological link.
aEndTpRefList	NamingAttributeListType	Name of A-end TP (PTP/CTP/FTP). The termination point name must be explicit.
zEndTpRefList	NamingAttributeListType	Name of Z-end TP (PTP/CTP/FTP). The termination point name must be explicit.
VendorExtensions	VendorExtension	ciscoTopologicalLinkExtension. Contains the following attributes: • name • description • directionality • layerRate

4.6.1.4.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

NOTE:

1. This API provides the internal Patch chords that are part of the NCS2K participating in an OCHTrail UNI setup. The internal Patch chords will be grouped for a given network element.
2. The response to an OCH Trail UNI will contain the LMP links between the NCS2K and NCS4K nodes in addition to the physical links between the NCS2K nodes.
3. The Internal Patch chords of an NCS2K will be listed as Topological Links. The Vendor extension part of the Topological Links will contain the “orderNumber” to indicate the patch chord Order. There will be even number of patch chords in each device. First half of the patch chords will represent the forward direction, the second half will represent the reverse direction.

4.7 FlowDomainRetrieval (Carrier Ethernet Inventory)

An EVC Flow Domain Fragment (FDFr) is a logical entity that contains a transparent end-to-end connectivity between two or more FPs (at the same connectionless layer) within an FD. The FDFr represents a Virtual Private Network (VPN) for a single customer in the provider network and enables the flow of traffic between FPs.

The server-layer CPTPs of the FPs that are connected through an FDFr must be assigned to MFDs that are associated to the FD that contains the FDFr. If traffic arrives at a point that is a member of an FDFr, it emerges at one or more of the other edge FPs that are members of the same FDFr.

The edge FPs that act as endpoints of the FDFr can be associated with CPTPs connected to customer domains or to other provider domains (of the same or different providers). The VLAN IDs of the FPs of the same FDFr must be equal and in particular must be the VLAN ID of the outermost frame. An FDFr may also support untagged frames or may be unaware of frame tags.

4.7.1 Flow Domain Fragment Data

The following table lists the flow domain fragment data that can be retrieved by the interface.

Flow Domain Fragment Data	Data Type	Description
fdfr	FlowDomainFragmentType	Holder element that contains the data for the flow domain fragment.
name (Object Id)	NamingAttributeType	List of RDN types representing an FDFr. Consists of MD, FDFR.
direction	ConnectionDirectionType	Directionality of Ethernet Service. **Note:** * always bidirectional.
isFlexible	Boolean	Flexibility of Ethernet Service (fixed or flexible). If the FDFr is fixed, NMS cannot modify or delete it; FPs cannot be added or removed.
administrativeState	AdministrativeStateType	Administrative State of Flow Domain Fragment (locked or unlocked). If the FDFr is locked, traffic units cannot flow through the FDFr. If the FDFr is unlocked, traffic units are allowed to flow through the FDFr.
fdfrState	SubnetworkConnectionStateType	Sub-network connection state type of fragment. Can be: • Active • Partial
fdfrType	FlowDomainFragmentTypeType	Administrative state associated with service. • Point-to-point • Point- to-multipoint • Multipoint
transmissionParameters	LayeredParametersType	Layer rate on which connectivity is established and a related set of connectionless parameters.
layerRate	LayerRateType	VENDOR_EXT, extension = LR_Cisco_CarrierEthernet
TransmisionParameters. VendorExtensions		
pwEdgeNameList	AnyListType	List of Cisco_EVC_PWEdge_Names of type NamingAttribute, contained in FDFrType.transmissionParameters.vendorExtension.
vfiNameList	AnyListType	List of Cisco_EVC_VFI_Names of type NamingAttribute, contained in FDFrType.transmissionParameters.vendorExtension.
aEndTpDataList	TerminationPointDataListType	Flow points between which connectivity is established by this flow domain fragment.

zEndTpDataList	TerminationPointDataListType	Flow points between which connectivity is established by this flow domain fragment, with the termination point data included for each flow point.
tpData	TerminationPointDataType	A-end or Z-end termination point data container for the following attributes.
tpRef	NamingAttributeType	List of RDN types representing a reference to the termination point.
TerminationPointData TransmissionParametersVendorExtensions		**Contains Cisco specific Vendor Extensions**
efpList	AnyListType	List of CiscoEFPParamNameType contained in FDFrType.a/zEndTpData.transmissionParameters.vendorExtension.
Cisco_EFP_Param_NameType	CiscoEFPParamNameType	Ethernet Flow Point (EFP) parameters.
outerVlanTpId	String	Outer VLAN TPID of EFP.
innerVlanTpId	String	Inner VLAN TPID of EFP.
untaggedDefault	String	Match untagged traffic.
svIdList	String	SVLAN (outer VLAN) ID list.
cvIdList	String	Optional CVLANs (Inner VLANs); if this EFP matches both an outer VLAN and inner VLANs.
rewriteOuterVlanId	String	Outer VLAN id rewrite value. 1-4094 if rewrite or push; -1 if not.
rewriteinnerVlanId	String	Outer VLAN id rewrite value. 1-4094 if rewrite or push; -1 if not.
description	String	Description.
l2CPProfile	String	L2CP Profile name.
mtu	String	MTU (Max Transmission Unit) value.
qoSIngressPolicy	String	Ingress QoS policy name.
qoSEgressPolicy	String	Egress QoS policy name.
pwClassName	String	Pseudowire endpoint class name.
pwClassNameBackup	String	Pseudowire endpoint class name.
administrationState	String	EFP administrative state.
operationalState	String	EFP operational state.

4.7.2 Operations getAllFlowDomainFragments

This operation retrieves information about all flow domain fragments present in Cisco EPN Manager.

4.7.2.1.1 Input

Request parameter	Data Type	Description
requestedBatchSize	integer	Maximum number of objects to return.
getAllFlowDomainFragmentsRequest	NamingAttributeType	Managed domain and the FlowDomain Fragment to be queried For example: Name=MD, value=CISCO_MLM

4.7.2.1.2 Output

Response Data	Data Type	Description
getAllFlowDomainFragmentsResponse	getAllFlowDomainFragmentsResponse	Details of specified Flow Domain Fragment. For information on the attributes, refer to Flow Domain Fragment Data above.

4.7.2.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.7.2.2 *getFlowDomainFragmentIterator*

This operation retrieves information about flow domains in batches.

4.7.2.2.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Representing the iterator reference URI which must be present to retrieve next batch of Objects. Note: this information is set on the request message on the MTOSI header part.

4.7.2.2.2 Output

Response parameter	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve next batch.
getFlowDomainFragmentsIteratorResponse	etFlowDomainFragmentsIteratoResponse	Container for the list of Flow Domain. Fragments. For the details on the attributes, refer to Flow Domain Fragment Data above.

4.7.2.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.7.2.3 *getFlowDomainFragment*

This operation retrieves information about a specified Flow Domain fragment.

4.7.2.3.1 Input

Request parameter	Data Type	Description
getFlowDomainFragmentRequest	NamingAttributeType	Managed Domain and the FlowDomain Fragment to be queried. For example: Name=MD, value=CISCO_MLM, Name=FDFR, value=Flow Domain Fragment Route Id

4.7.2.3.2 Output

Response parameter	Data Type	Description
getFlowDomainFragmentResponse	getFlowDomainFragmentResponse	Details of specified Flow Domain Fragment. For Details on the attributes, refer to Flow Domain Fragment Data above

4.7.2.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.7.2.4 *getFlowDomainFragmentRoute*

This operation retrieves information about Flow domain routes.

4.7.2.4.1 Input

Request parameter	Data Type	Description
getFlowDomainFragmentRouteRequest	getFlowDomainFragmentRouteRequest	Container for holding the fdfrRef.
fdfrRef	NamingAttributeType	List of RDN types representing the FDFr for which the route will be returned.

4.7.2.4.2 Output

Response Data	Data Type	Description
getFlowDomainFragmentRouteResponse	getFlowDomainFragmentRouteResponse	Information about the flow domain fragment Route.
route	FlowDomainFragmentRouteType	Holder for list of matrix flow domain Fragments representing the route.
mfdfr	MatrixFlowDomainFragmentType	Holder for the matrix flow domain fragment data mentioned below.
direction	String	Directionality of the FDFr (bidirectional or unidirectional). Bidirectional for Ethernet.
aEndTpRefList	NamingAttributeListType	Flow points between which connectivity is established by this matrix flow domain fragment.
zEndTpRefList	NamingAttributeListType	Flow points between which connectivity is established by this matrix flow domain fragment.
isFlexible	Boolean	Whether the flow domain fragment is fixed.
isActive	Boolean	Whether the MFDFr has been successfully activated in the Network Element (NE). True if the MFDFr is active in the ME; false otherwise.
actualState	String	Summary state of the actual state of XCs in the network.
mfdfrType	FlowDomainFragmentTypeType	Type of the FDFr. 1.VIRTUAL PRIVATE LAN (MULTIPOINT) 2. VIRTUAL PRIVATE LINE (POINT-TO-POINT) 3. PRIVATE LAN (MULTIPOINT) 4. PRIVATE LINE (POINT-TO-POINT)
transmissionParameters	transmissionParameters	Layer rate on which connectivity is established and a related set of connectionless parameters.
VendorExtensions	VendorExtension	Vendor extensions to the basic information.
ciscoEVCRouteTransmAttrNameType	**CiscoEVCRouteTransmAttrNameType**	**Holder to contain following Cisco specific EVC Route attributes**
Cisco_EVC_PWEdge_Name	String	Pseudowire endpoint name.

Response Data	Data Type	Description
Cisco_EVC_PWEdge_Local_Router_IP	String	Pseudowire endpoint local router IP.
Cisco_EVC_PWEdge_Peer_Router_IP	String	Pseudowire endpoint peer router IP.
Cisco_EVC_PW_Priority	String	Pseudowire endpoint priority.
Cisco_PW_Class_Param_NameType	String	Pseudowire endpoint type.
Cisco_EVC_PWEdge_VC_ID	Long	Pseudowire endpoint ID.
Cisco_EVC_VFI_Name	String	VirtualForwardingInstance Name.
Cisco_EVC_VFI_Discovery_Mode	String	Discovering mode (MANUAL / AUTO).
Cisco_EVC_VFI_bridgeGroup_ID	long	Virtual forwarding instance bridge group ID.
Cisco_EVC_VFI_ID	Long	Virtual forwarding instance ID

4.7.2.4.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.8 FlowDomainFragmentNameRetrieval (Carrier Ethernet Inventory)

This interface provides operations to retrieve flow domain fragment names in a batched multiple responses.

4.8.1 Operations

4.8.1.1 *getAllFlowDomainFragmentNames*

This operation retrieves a list of flow domain fragment names.

4.8.1.1.1 Input

Request parameter	Data Type	Description
getAllFlowDomainFragementNamesRequest	NamingAttributeType	Management Domain name. For example: Name=MD, value=CISCO_MLM, Name=ME, value=ME_NAME_ID

4.8.1.1.2 Output

Response parameter	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getAllFlowDomainFragmentNamesResponse	getAllFlowDomainFragmentNamesResponse	Management domain name. The response contains the names of the flow domain fragments in the domain.
name (Object Id)	NamingAttributeType	List of RDN types representing the FDFr Object Id. Consists of MD, FDFR RDN types.
discoveredName	String	The discovered name of the flow domain fragment.

4.8.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.8.1.2 *getFlowDomainFragmentNamesIterator*

This operation retrieves Flow Domain fragment names in batches.

4.8.1.2.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve the next batch of Objects. Note: This information is set on the request message on the MTOSI header part.

4.8.1.2.2 Output

Response parameter	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getFlowDomainFragmentNamesIteratorResponse	etFlowDomainFragmentNamesIteratoResponse	Container for the list of Flow Domain Fragment Names.
name (Object Id)	NamingAttributeType	List of RDN types representing the FDFr Object Id. Consists of MD, FDFR RDN types.
discoveredName	String	The discovered name of the FlowDomainFragment.

4.8.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.9 ServiceInventoryRetrieval

The ServiceInventoryRetrieval operations retrieve service inventory details.

4.9.1 Customer Facing Service (CFS) Data

The following table lists the Customer Facing Service (CFS) data that can be retrieved by the interface.

Customer Facing Service (CFS) Data	Data Type	Description
cfs	CusotmerFacingServiceType	Holder element that contains the data given below for the CFS object.
name (Object Id)	NamingAttributeType	List of RDNs containing the MD and CFS.
userLabel	String	CFS Name.
discoveredName	String	CFS Name.
owner	String	Syscontact of CFS.
description	String	Description.
hasStarted	boolean	Ignore this attribute
isMandatory	boolean	Ignore this attribute

startMode	StartModeType	Ignore this attribute
isStateful	Boolean	Stateful condition of CFS.
serviceState	ServiceStateType	RESERVED PROVISIONED_INACTIVE PROVISIONED_ACTIVE
VendorExtensions		Contains Cisco-specific Vendor Extensions. Based on the type of CFS data, the vendor extensions contain the following extensions: 1. Carrier Ethernet Extensions 1.1. ciscoCeCfsAttributes 2. Optical Extensions 2.1. CiscoOpticalCircuitOchTrailExtension 2.2. CiscoOpticalCircuitOduTunnelExtension 2.3. CiscoOpticalCircuitOduUniExtension 2.4. CiscoOpticalCircuitOchCCExtension 2.5. CiscoOpticalCircuitOchNCExtension 2.6. CiscoOpticalCircuitOchTrailUniExtensionType
ciscoCeCfsAttributes	**CiscoCeCfsAttributesType**	**Holder to contain following Cisco specific CFS attributes related to Carrier Ethernet**
uniCeVlanIdPreservation	String	Maintain CE-VLAN id preservation throughout network (true or false).
uniCeVlanCosPreservation	String	Maintain CE-VLAN CoS preservation throughout network (true or false).
mtuSize	String	MTU size associated with the OVC endpoint. Takes string value
rfsRefList	NamingAttributeListType	Resource Facing Service Ref list.
unicastServiceFrameDelivery	String	Service frame delivery option for Unicast Service Frames (Service Frames with unicast destination MAC addresses) as: Discard, DeliverUnconditionally, or DeliverConditionally.
multicastServiceFrameDelivery	String	Service frame delivery option for Multicast Service Frames (Service Frames with unicast destination MAC addresses) as: Discard, DeliverUnconditionally, or DeliverConditionally.
broadcastServiceFrameDelivery	String	Service frame delivery option for Broadcast Service Frames (Service Frames with unicast destination MAC addresses) as: Discard, DeliverUnconditionally, or DeliverConditionally.
ciscoOpticalCircuitOchTrailExtension	**CiscoOpticalCircuitOchTrailExtensionType**	**Holder to contain following Cisco specific OpticalCircuitOchTrail attributes**
restorationType	String	Restoration type of OpticalCircuitOchTrail element. Allowed values: • NONE • FAILED • RESTORED • RESTORING • REVERTIBLE • REVERTING

activationState	String	State of activation of OpticalCircuitOchTrail element. Allowed values: • ACTIVE • INACTIVE
label	String	Unique Circuit Identifier; an alphanumeric string that identifies the circuit along the used path. Different circuits may have the same label as long as they do not share any resource.
isRegenerationAllowed	String	Allow the optical feasibility at each CEO conversion site and support wavelength change.
upstreamPowerOffset	String	Offset of upstream channel.
downstreamPowerOffset	String	Offset of downstream channel.
pathPolicy	String	Indicates the path policy selection. Allowed values: • ANY • LOGO
ignorePathAlarms	String	Optional Parameter. When set, the link port alarm status along the light path is ignored when creating a circuit.
circuitDiversity	String	Routing constraints used by control plane to avoid resources being used by selected circuits during provisioning. Not Supported on TL1.
revert	String	Indicate revertive mode of circuit. Allowed values: • NA • FAILED • NONE • RESTORED • RESTORING • REVERTIBLE • REVERTING
soakTime	Date	OSS-AINS to IS transition soak time, as measured in 15 minute interval. The allowable range is 0 to 192 intervals (max of 48 hours).
frequency	String	Frequency of OpticalCircuitOchTrail element.
width	String	Width of OpticalCircuitOchTrail element.
adminState	String	Administrative state of the interface. When a managed system initializes, all interfaces start with ifAdminStatus in down state. As a result of either explicit management action or per configuration information retained by the managed system, ifAdminStatus is then changed to either the up or testing states (or remains in the down state). This is modeled after the IF-MIB ifAdminStatus OID. Allowed values: • Up • Down • Testing
circuitId	String	Circuit Id
direction	String	Direction of circuit. Allowed values: • UNIDIRECTIONAL • BIDIRECTIONAL

layerRate	String	The layer Rate of Circuit. LR_Physical_2_5_Gigabit_ITU LR_Physical_10_Gigabit_ITU LR_DSR_OC3_STM1 Etc…
ciscoOpticalCircuitOduTunnelExtension	**ciscoOpticalCircuitOduTunnelExtensionType**	**Holder to contain following Cisco specific ciscoOpticalCircuitOduTunnel attributes**
bandwidth	String	Name of the associated protection profile. Type of OTN OPU that is used to transport the incoming payload. Allowed values: • OPU0 • OPU1 • OPU1E • OPU2 • OPU2E • OPU3 • OPU3E1 • OPU3E2 • OPU4 • OPU4FLEX
recordReroute	String	Record reroute of circuit.
protectionType	String	Protection type of circuit. Allowed values: • UNPROTECTED • ONE_PLUS_ONE • RESTORED • PROTECTED_AND_RESTORED
timeSlot	String	Timeslot of circuit.
adminState	String	Administrative state of the interface. When a managed system initializes, all interfaces start with ifAdminStatus in down state. As a result of either explicit management action or per configuration information retained by the managed system, ifAdminStatus is then changed to either the up or testing states (or remains in the down state). This is modeled after the IF-MIB ifAdminStatus OID. Allowed values: • up • Down • testing
circuitId	String	Circuit Id
direction	String	Direction of circuit. Allowed values: • NIDIRECTIONAL • BIDIRECTIONAL
layerRate	String	The layer Rate of Circuit. LR_Physical_2_5_Gigabit_ITU LR_Physical_10_Gigabit_ITU LR_DSR_OC3_STM1 Etc…
CiscoOpticalCircuitOduUniExtension	**CiscoOpticalCircuitOduUniExtensionType**	**Cisco EMS-specific CiscoOpticalCircuitOduUniExtensionType attributes as vendorExtensions. Contains all the related attributes.**

adminState	String	Defines possible values for the administrative state of the interface. When a managed system initializes, all interfaces start with ifAdminStatus in the down state. As a result of either explicit management action or per configuration information retained by the managed system, ifAdminStatus is then changed to either the up or testing states (or remains in the down state). This is modeled after the IF-MIB ifAdminStatus OID. Allowed values: • Up • Down • Testing
circuitId	String	Circuit Id.
direction	String	Direction of circuit. Allowed values: • UNIDIRECTIONAL • BIDIRECTIONAL
layerRate	String	The layer Rate of Circuit. LR_Physical_2_5_Gigabit_ITU LR_Physical_10_Gigabit_ITU LR_DSR_OC3_STM1 Etc…
ciscoOpticalCircuitOchCCExtension	**ciscoOpticalCircuitOchCCExtensionType**	**Defines Cisco EMS-specific ciscoOpticalCircuitOchCCExtension Type attributes as vendorExtensions. It contains all the related attributes.**
opticalCircuitRFS	String	Instance id of associated RFS circuit.
provisioningState	String	State of provisioned circuit.
adminState	String	Defines possible values for the administrative state of the interface. When a managed system initializes, all interfaces start with ifAdminStatus in the down state. As a result of either explicit management action or per configuration information retained by the managed system, ifAdminStatus is then changed to either the up or testing states (or remains in the down state). This is modeled after the IF-MIB ifAdminStatus OID. Allowed values: • Up • Down • Testing
circuitId	String	Circuit Id.
direction	String	Direction of circuit. Allowed values: UNIDIRECTIONAL BIDIRECTIONAL
layerRate	String	The layer Rate of Circuit. LR_Physical_2_5_Gigabit_ITU LR_Physical_10_Gigabit_ITU LR_DSR_OC3_STM1 Etc.
ciscoOpticalCircuitOchNCExtension	**ciscoOpticalCircuitOchNCExtensionType**	**Defines Cisco EMS-specific ciscoOpticalCircuitOchNCExtensionType attributes as vendorExtensions. It contains all the related attributes.**

restorationType	String	restorationType of OpticalCircuitOchTrail element. Allowed values: • NONE • FAILED • RESTORED • RESTORING • REVERTIBLE • REVERTING
activationState	String	State of activation of OpticalCircuitOchTrail element. Allowed values: • ACTIVE • INACTIVE
label	String	Unique Circuit Identifier; an alphanumeric string that identifies the circuit along the used path. Different circuits may have the same label as long as they do not share any resource.
isRegenerationAllowed	String	Allow the optical feasibility at each CEO conversion site and support wavelength change.
upstreamPowerOffset	String	Offset of upstream channel.
downstreamPowerOffset	String	Offset of downstream channel.
pathPolicy	String	Path policy selection. Allowed values: • ANY • LOGO
ignorePathAlarms	String	Optional Parameter. When set, the link port alarm status along the light path is ignored when creating a circuit.
revert	String	Indicate revertive mode of circuit. Allowed values: • NA • FAILED • NONE • RESTORED • RESTORING • REVERTIBLE • REVERTING
soakTime	Date	OSS-AINS to IS transition soak time as measured in 15 minute interval. The allowable range is 0 to 192 intervals (max of 48 hours).
frequency	String	Frequency of OpticalCircuitOchTrail element.
width	String	Width of OpticalCircuitOchTrail element.
adminState	String	Defines possible values for the administrative state of the interface. When a managed system initializes, all interfaces start with ifAdminStatus in the down state. As a result of either explicit management action or per configuration information retained by the managed system, ifAdminStatus is then changed to either the up or testing states (or remains in the down state). This is modeled after the IF-MIB ifAdminStatus OID. Allowed values: • Up • Down • Testing

circuitId	String	Circuit Id.
direction	String	Direction of circuit. Allowed values: UNIDIRECTIONAL BIDIRECTIONAL
layerRate	String	The layer Rate of Circuit. LR_Physical_2_5_Gigabit_ITU LR_Physical_10_Gigabit_ITU LR_DSR_OC3_STM1 Etc…
CiscoOpticalCircuitOchTrailUniExtension	**CiscoOpticalCircuitOchTrailExtensionType**	**Cisco EMS-specific CiscoOpticalCircuitOchTrailUniExtensionType attributes as vendorExtensions. Contains all the related attributes.**
restorationType	String	restorationType of OpticalCircuitOchTrail element. Allowed values: • NONE • FAILED • RESTORED • RESTORING • REVERTIBLE • REVERTING
deployed	String	Boolean value Indicates if the service is deployed on network(true) or not (false)
adminState	String	Defines possible values for the administrative state of the interface. When a managed system initializes, all interfaces start with ifAdminStatus in the down state. As a result of either explicit management action or per configuration information retained by the managed system, ifAdminStatus is then changed to either the up or testing states (or remains in the down state). This is modeled after the IF-MIB ifAdminStatus OID. Allowed values: • Up • Down • Testing
circuitId	String	Circuit Id.
direction	String	Direction of circuit. Allowed values: • UNIDIRECTIONAL • BIDIRECTIONAL
layerRate	String	The layer Rate of Circuit. LR_Physical_2_5_Gigabit_ITU LR_Physical_10_Gigabit_ITU LR_DSR_OC3_STM1 Etc…
sncId	String	The ID of the associated SNC
provisioningState	String	State of provisioned circuit.
description	String	Description about the OchTrail UNI
provisioningState	String	Enumeration value that indicates the provisioning state Created
status	String	Status of the provisioned circuit
type	String	Contains the value TRAIL_UNI

4.9.2 Service Access Point (SAP) Data

The following table lists the Service Access Point (SAP) data that can be retrieved by the interface.

Service Access Point (SAP) Data	Data Type	Description
sap	ServiceAccessPointType	Holder element that contains the data given below for the SAP Object.
name (Object Id)	NamingAttributeType	List of RDNs containing the MD and CFS.
userLabel	String	CFS Name.
discoveredName	String	CFS Name.
owner	String	Syscontact of CFS.
description	String	Description.
adminState	AdminStateType	LOCKED, UNLOCKED, SHUTTON_DOWN
operationalState	OperationalStateType	DISABLED, ENABLED
VendorExtensions		**Contains Cisco specific Vendor Extensions**
ciscoCeSapAttributes	CiscoCeSapAttributesType	Holder to contain following Cisco-specific CFS SAP attributes.
portRef	NamingAttributeType	FDN for UNI or ENNI.
portSpeedRate	string	This attribute is specified for UNI/ENNI port speed.
portMode	string	Port mode. Takes String value of half duplex or duplex.
bundlingIndicator	string	Whether bundling is enabled at the ETH UNI. Bundling allows incoming frames with multiple CE VLAN IDs to be mapped to a single EVC. Must be set to FALSE if allToOneIndicator is set to TRUE. An EVC with more than one CE-VLAN ID mapping to it MUST have the CE-VLAN ID Preservation Service Attribute and the list of CE-VLAN IDs mapped to the EVC MUST be the same at each UNI in the EVC. Takes String value of "true", "false".
allToOneIndicator	string	To support Bundling, all CE VLAN IDs must be mapped to a single EVC (or ETH_FDFr_EVC) at the UNI. When a UNI has the All to One Bundling, all CE-VLAN IDs MUST map to a single EVC at the UNI. The EVC at the UNI MUST have the CE-VLAN ID Preservation Service Attribute and the list of CE-VLAN IDs mapped to the EVC MUST be the same at each UNI in the EVC. If "All-to-One" is used, the allToOneIndicator Boolean attribute in the ETH_FPP_UNI should be set to TRUE, and the ETH_FPP_UNI of the UNI shall support only a single ETH_Flow_Point. Take String value of "true", "false".
l2ControlProtocolProfile	string	List that describes Layer 2 control protocols, along with the frame disposition for each potential destination UNI: - Discard: The Service Frame is discarded. - Tunnel: No matter what the content (assuming correct FCS) of the Service Frame, it is delivered across the other (egress) UNI(s). Take String value of Structure: "ControlProtocolName: String"; "DestinationMACAddress: hex", "DestinationUNI", "Disposition: Discard | Tunnel"

portMtuSize	string	SAP UNI/ENNI MTU size.
portServiceMuxIndicator	string	SAP UNI MTU size.
portMaxNumOfVCs	string	SAP UNI/ENNI max number of virtual connections.
portPhysicalMedium	string	SAP UNI physical medium.
portMacLayer	string	SAP UNI/ENNI MAC layer in IEEE 802.3-2002 or EEE 802.3-2005 frame formats.
portEnableOAM	string	Enables SAP UNI OAM.
portEnableLinkManagement	string	Enables SAP UNI CFM Link Management.
ceVLANIdList	string	Customer VLAN ID list. Takes String value
matchUntagged	boolean	Untagged frame of SAP.
role	string	Role of SAP - root or leaf.
eoamMEPGroup	string	EOAM MEP Group config.
operatorIdentifier	string	SAP ENNI operator identifier.
frameFormat	string	SAP ENNI frame format.
protectionMechanism	string	SAP ENNI protection mechanism.
numberOfLinks	string	SAP ENNI number of links.
maxOVCendpoints	string	SAP ENNI maximum OVC end points.
innerVlanIdList	string	SAP QinQ inner VLAN ID.
priorityTagged	boolean	SAP QinQ priority tagged frame.
matchExact	boolean	SAP QinQ match exact frame.
vlanCoS	string	SAP QinQ VLAN CoS.
innerVlanCoS	string	SAP QinQ inner VLAN CoS.
matchType	MatchTypeEnumType	Enum values for Match Type (encapsulation type) for endpoint.
MatchTypeEnumType	ENUM	Allowed values are default, dot1ad, dot1q, priority-tagged, untagged.
etherType	EtherTypeType	Container that holds etherType options.
EtherTypeType		Choice of any combination of ipv4, ipv6, pppoeAll, pppoeDiscovery, pppoeSession fields.
ipv4	boolean	-
ipv6	boolean	-
pppoeAll	boolean	-
pppoeDiscovery	boolean	-
pppoeSession	boolean	-
rewriteDefinition	RewriteDefinitionType	Container that holds Rewrite Defintion (Advanced Frame Manipulation).
RewriteDefinitionType		Choice of popOperation, pushOperation, translateOperation.
popOperation	PopOperationType	Container that holds Pop Operation configuration (Advanced Frame Manipulation).
PopOperationType		Option to set the tagCount
pushOperation	PushOperationType	Container that holds Push Operation configuration (Advanced Frame Manipulation).
PushOperationType		Option to set the tagCount, matchType, innerVlanId, outerVlanId.
translateOperation	TranslateOperationType	Container that holds Translate Operation configuration (Advanced Frame Manipulation).

TranslateOperationType		Option to set the tagTranslation, matchType, innerVlanId, outerVlanId.
tagCount	TagCountEnumType	Enum values for Push Tag.
TagCountEnumType	ENUM	Allowed values are one and two.
matchType	MatchTypeEnumType	Enum values for Match Type (encapsulation type) for endpoint.
innerVlanId	string	QinQ inner VLAN ID.
outerVlanId	string	QinQ outer VLAN ID.
tagTranslation	TagTranslationEnumType	Enum values for Push Tag.
TagTranslationEnumType	ENUM	Allowed values are one-to-one, one-to-two, two-to-one, and two-to-two.
ingressQoSPolicy	string	incoming QoS policy name.
egressQoSPolicy	string	outgoing QoS policy name.
ingressBandwidthProfile	Cisco_BWProfileListType	incoming QoS policy name.
egressBandwidthProfile	Cisco_BWProfileListType	outgoing QoS Bandwidth Profile list.
Cisco_BWProfileType	Cisco_BWProfileType	Cisco Ethernet QoS Bandwidth Profile for SAP
className	string	QoS class name. Takes String value: pcp header, svlanId, ip, cos, dscp
matchValue	string	QoS classification value.
cir	string	Incoming/outgoing QoS parameter. Takes String value: Kbps|Mbps|Gbps
cbs	string	Incoming/outgoing QoS parameter. Takes String value: Kbps|Mbps|Gbps
eir	string	Incoming/outgoing QoS parameter. Takes String value: Kbps|Mbps|Gbps
ebs	string	Incoming/outgoing QoS parameter. Takes String value: Kbps|Mbps|Gbps
colorMode	string	incoming/outgoing QoS parameter. Takes String value: Kbps|Mbps|Gbps
coupling		incoming/outgoing QoS parameter. Takes String value: Kbps|Mbps|Gbps
Cisco_BWProfileListType	Cisco_BWProfileListType	A list of QoS Bandwidth Profile per CoS.
CiscoCFSOpticalSAPAttrs	**CiscoCFSOpticalSAPAttrsType**	**Holder to contain following Cisco-specific CFSOptical SAP attributes.**
ipAddress	String	IpAddress of the node where SAP is residing.
name	String	Sysname of Node
displayName	String	Name of SAP node
instanceId	String	instanceid of SAP node
role	String	It is used to indicate A or Z end.
protocolEndpoint	CiscoOpticalProtocolEndPointListType	It represents the details of the A or the Z End.

4.9.3 Operations

4.9.3.1 *getServiceInventory*

This API queries the service inventory from Cisco EPN Manager. The message structure of the getServiceInventory operation contains filter criteria for scope data. This operation returns a specified portion of the inventory data from the target operating system. The operation can only be directed to a top-level operating system and not to a subordinate operating system.

4.9.3.1.1 Input

Request parameter	Data Type	Description
getServiceInventoryRequest	getServiceInventoryRequest	Request message structure for getServiceInventory operation.
Filter	SimpleServiceFilterType	Subset of the total inventory to be returned to the requesting OS.
baseInstance	NamingAttributeType	Set of RNDs that consists of MD, SERVICE_TYPE, CFS/SAP instance IDs. CFS/SAP Instance IDs are optional. For example : <v11:baseInstance> <v12:rdn> <v12:type>MD</v12:type> <v12:value>CISCO_EPNM</v12:value> </v12:rdn> <v12:rdn> <v12:type>SERVICE_TYPE</v12:type> <v12:value>EP-Tree</v12:value> </v12:rdn> </v11:baseInstance>
serviceObjectType	String	ServiceObjectType is an Enumerated type. Supported values are: • CFS • SAP
Selection	GranularityType	Filter attribute used to select the granularity of the Inventory report. Supported Enumerated values are: NAME – Retrieve Name only. FULL – Retrieve the name and the other object attributes. Including the reference attributes.

4.9.3.1.2 Output

The response lists inventory objects of same type. CFS and SAP are the two supported Inventory objects. An iterator interface retrieves the objects in blocks.

Response Data	Data Type	Description
getServiceInventoryResponse	getServiceInventoryResponse	Response message structure of getServiceInventory operation.
inventoryData	ServiceInventoryDataType	Inventory data which may vary based on the MEP.
cfsList	Anonymous type holding “cfs” elements of type CustomerFacingServiceType	CFS (Customer Facing Service), the instantiation of a given service that is bound to a particular product. It is an abstraction that defines the characteristics and behavior of a particular service as seen by the customer. See Customer Facing Service Data for details of the data returned in this object.

Response Data	Data Type	Description
sapList	Anonymous type holding "sap" elements of type ServiceAccessPointType	SAP (Service Access Point), a set of parameters associated (directly or indirectly) with a unique (logical and/or physical) resource where the single Service can be accessed. A Service is often associated with a list of SAPs. See Service Access Point Data for details of the data returned in this object.

4.9.3.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

NOTE: This API will not return the CFS's that are created internally (implicit CFS's such as ODU Tunnels that are created as part of ODU UNI).

4.9.3.2 *getServiceInventoryIterator*

This operation retrieves information about Flow Domain fragment names in batches.

4.9.3.2.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve next batch of Objects. **Note:** this information is set on the request message on the MTOSI header part.

4.9.3.2.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getServiceInventoryIteratorResponse	ServiceInventoryDataType	Container for list of Service Inventory Objects (CFS, SAP). For details of the data in CFS and SAP, see the data tables.

4.9.3.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.10 CustomerNameRetrieval

This interface provides operations that retrieve customer names. Can be used to retrieve the customer names required for provisioning input.

4.10.1.1 *getAllCustomerNames*

This operation retrieves the list of customer names.

4.10.1.1.1 Input

Request Parameter	Data Type	Description
getAllCustomerNamesRequest	getAllCustomerNamesRequest	Element representing the request. MTOSI request headers batch size controls how much data will be returned.

4.10.1.1.2 Output

Response Data	Data Type	Description
getAllCustomerNamesResponse	getAllCustomerNamesResponse	The response containing the list of customer names. Each contains elements mentioned below.
customerNameList	CustomerNameListType	List to hold the customer name.
customerName	CustomerNameType	This element contains the details given below.
name (Object Id)	NamingAttributeType	List of RDNs containing the MD and CUSTOMER.
discoveredName	String	Name of customer.

4.10.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.10.1.2 *getCustomerNamesIterator*

This operation retrieves the handle to the Iterator, which can be used to retrieve the list of customer names.

4.10.1.2.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve next batch of managed elements. **Note:** This information is set on the request message on the MTOSI header part.
getCustomerNamesIteratorRequest	getCustomerNamesIteratorRequestType	Empty element representing the iterator request.

4.10.1.2.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	boolean	indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getCustomerNamesIteratorResponse	getCustomerNamesIteratorResponseType	Holder for containing the list of Customer Names. Each customer name details is same as in the getAllCustomerNames operation response.

4.10.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.11 QosProfileNameRetrieval

This interface provides operations that retrieve QoS profile names. Can be used to retrieve the QoS profile names required for provisioning input.

4.11.1.1 *getAllQosProfileNames*

This operation retrieves the list of QoS profile names.

4.11.1.1.1 Input

Request Parameter	Data Type	Description
getAllQosProfileNamesRequest	getAllQosProfileNamesRequest	Element representing the request. MTOSI request headers batch size controls how much data will be returned.

4.11.1.1.2 Output

Response Data	Data Type	Description
getAllQosProfileNamesResponse	getAllQosProfileNamesResponse	The Response containing the list of QoS profile names. Each contains elements mentioned below.
qosProfileNameList	QosProfileListType	List to hold the QoS profile names.
qosProfileName	QosProfileNameType	This element contains the details given below.
name (Object Id)	NamingAttributeType	List of RDNs containing the MD and QOS_PROFILE.
discoveredName	String	Name of QoS profile.

4.11.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.11.1.2 *getQosProfileNamesIterator*

This operation retrieves the handle to the Iterator, which can be used to retrieve the list of QoS profile names.

4.11.1.2.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve next batch of managed elements. **Note:** This information is set on the request message on the MTOSI header part.
getQosProfileNamesIteratorRequest	getQosProfileIteratorRequestType	Empty element representing the iterator request.

4.11.1.2.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.

getQosProfileNamesIteratorResponse	getQosProfileNamesIteratorResponseType	Holder for containing the list of QoS profile names. Each QoS profile name details is same as in the getAllQosProfileNames operation response.

4.11.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.12 OpticalLinkInterfaceRetrieval

This interface provides operations that retrieve the Link Information. Can be used to retrieve return a list of Links that can be used to specify as part of the Constraints in a DWDM service.

4.12.1 getAllOpticalLinkInterfaces

This operation retrieves the list of Optical Links returned by a call to the OpticalLinkInterfaces. This API will return information about the Nodes and the Links where the Nodes are part of. The data returned by the API will contain name of the nodes the links as part of the discoveredName attribute. This API is used to provide the Constraints information when provisioning Optical DWDM services (OCHNC, OCHCC or OCHTRAIL). The OSS user will have to take only those entries where the discoveredName indicates a Link. The entries returning the nodes has to be discarded when Links has to be specified.

4.12.1.1.1 Input

Request Parameter	Data Type	Description
getAllOpticalLinkInterfacesRequest	getAllOpticalLinkInterfacesRequest	Element representing the request. MTOSI request headers batch size controls how much data will be returned.

4.12.1.1.2 Output

Response Data	Data Type	Description
getAllOpticalLinkInterfacesResponse	MultipleOpticalLinkInterfaceObjectsResponseType	The Response containing the list of Links that can be used to specify as part of the Constraints in a DWDM service. Each contains elements mentioned below.
opticalLinkInterfaceList	opticalLinkInterfaceListType	List to hold the Optical Link Interface Names.
opticalLinkInterface	opticalLinkInterfaceType	This element contains the details given below.
name (Object Id)	NamingAttributeType	List of RDNs containing the MD and OPTICAL_LINK_INTERFACE.
discoveredName	String	Name of the Optical Link. This data will contain either a Node or a Link. Eg: **nmtg-tme-test-2k-250** – For a Node **ONS15454-42 - WDMSIDE-C** – For a Link

4.12.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.12.2 getOpticalLinkInterfacesIterator

This operation retrieves the handle to the Iterator, which can be used to retrieve the list of Optical Link Endpoints Names.

4.12.2.1.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URL which must be present to retrieve next batch of managed elements. **Note:** This information is set on the request message on the MTOSI header part.
getOpticalLinkInterfacesIteratorRequest	GetAllDataIteratorRequestType	Empty element representing the iterator request.

4.12.2.1.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getOpticalLinkInterfacesIteratorResponse	MultipleOpticalLinkInterfaceObjectsResponseType	Holder for containing the list of Optical Endpoint Id. Each Optical Link Interface Name details is same as in the getAllOpticalLinkInterfaces operation response.

4.12.2.1.3 Exceptions

internalError: Indicates that an internal error or exception is occurring as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.13 ServiceActivationInterface

Cisco EPN Manager supports Optical and Carrier Ethernet service provisioning using set of operations defined in the ServiceActivationInterface. When OSS client uses this interface to do service provisioning, a set of CFS (Customer Facing Service) and RFS (Resource Facing Service) objects will be created/modified to handle the service management in the Cisco EPN Manager.

This section details the service provision operations that can be performed by the OSS client.

4.13.1 Supported Services for Provisioning

The API provides support for provisioning the following services.

Technology	Service	Service Type
Optical	OTN	ODU_TUNNEL ODU_UNI TRAIL_UNI
	OCH	OCHCC OCHNC OCH-Trail
Carrier Ethernet **Note:** Supplementary provisioning functions	ELINE	EPL EVPL

Technology	Service	Service Type
	ELAN	EP-LAN EVP-LAN
	E-Tree	EP-Tree EVP-Tree
	E-Access	Access EPL Access EVPL

4.13.2 Error Message Format with Error Codes

In Cisco EPN Manager, all the MTOSI APIs return error messages as SOAP Faults. In case of Service Actication APIs (Provisioning API), a SOAP fault message contains an additional element to provide more details about the error. These details contain the MTOSI specific error elements structure (internalError, NotImplementedError, etc) that contains Cisco EPN Manager specific error element to show the error details with error code and text message in the vendor extensions as shown below.

```
<soap:Fault>
    <faultcode>soap:Server</faultcode>
    <faultstring>Invalid Port reference for Device ID - TerminationPoint not found with FDN
[MD=CISCO_EPNM, ME=ASR903-165.68,
FTP=name=GigabitEthernet0/4/3;LR=LR_ETHERNET]</faultstring>
    <detail>
     <ns3:provisionException>
      <ns3:basicFailureEvent>
       <ns16:internalError>
        <ns16:vendorExtensions>
         <ns27:error>
          <ns27:code>MTOSI_0000</ns27:code>
          <ns27:message>Invalid Port reference for Device ID - TerminationPoint not found with
FDN [MD=CISCO_EPNM, ME=ASR903-165.68,
FTP=name=GigabitEthernet0/4/3;LR=LR_ETHERNET]</ns27:message>
         </ns27:error>
        </ns16:vendorExtensions>
       </ns16:internalError>
      </ns3:basicFailureEvent>
     </ns3:provisionException>
    </detail>
  </soap:Fault>
```

The content of the **error** element in the vendor extensions has the follow elements for error details:

- **code** - error code to identify the type of error which is a programming interface to the api that can be used to further process the error based on the code according to the OSS integration requirement.
- **message** - error message that explains the meaning behind the error in basic terms.

In case of provisioning configuration (cli) deployment failures where the operation response is not a SOAP Fault, the error code and message are returned in the **deployResult** element of the response.

4.13.2.1 *Deploy Result Error or Info message*

In case of provisioning configuration (cli) deployment failures where the operation response is not a SOAP Fault, the error code and message are returned in the **deployResult** element of the response.

In case of request timeout during the deployment in progress, the response message contains the **deployResult** element with **info** message with the deployResult's ***actionResult*** attribute set to ***"running"*** as below.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <header/>
  </soap:Header>
  <soap:Body>
    <ns3:provisionResponse>
      <ns3:cfsCreation>
        <ns5:vendorExtensions>
          <ns27:deployResult actionResult="running" action="deploy">
            <ns25:info>
              <ns25:code>MTOSI_9000</ns25:code>
              <ns25:message>Service deployment is in progress</ns25:message>
            </ns25:info>
          </ns27:deployResult>
        </ns5:vendorExtensions>
        <ns5:cfsCreationEvents>
          <!-- -->
        </ns5:cfsCreationEvents>
      </ns3:cfsCreation>
    </ns3:provisionResponse>
  </soap:Body>
</soap:Envelope>
```

4.13.2.2 *List of error codes*

Error code	Description
MTOSI_0000	Default error codes for all the errors/exceptions. This consists of any error occurred in the operation execution that will be returned with this code unless the specific error has a different code.
MTOSI_0001	Default error code for all methods which are not implemented exceptions. These are returned when user invokes a operation that is not implemented by Cisco EPN Manager.
MTOSI_4001	Default error code for provisioning configuration (cli) deployment failure errors. These errors/exceptions are returned as part of the deployResults field in a provisioning response (not as a SOAP fault, but in the response of the operation).
MTOSI_9000	Default info message code used for service provisioning deployment info messages. When request timeout happens while deployment is in progress, the deployment results return the info message with this code.

4.13.3 Service Order Data

The main input for service provisioning is Service Order Data which consists of service level and endpoint level configuration. Since this configuration is Cisco specific, ensure that you provide it using MTOSI vendor extensions of the MTOSI request.

The schema for the Service Order Data for Optical services versus that for Carrier Ethernet services is different. The following table provides the details of the service order data input required for each technology and service type.

4.13.3.1 *Optical Service Order Data*

4.13.3.1.1 OTN Service Order Data

The following table lists Order Data and supported values for OTN services.

OTN Service Order Data	Data Type	Mandatory / Optional	Description
ciscoOptServiceOrderData	**ciscoOptServiceOrderData**		**Container for Optical service provisioning order data details.**
otnServiceType	ENUM	Mandatory	OTN_OPU_FLEX, ETHERNET_OPU_FLEX, GFP_F
openEnd	BOOLEAN	Optional	
bandwidth	ENUM	Mandatory	NONE, ODU0, ODU1, ODU1e, ODU1f, ODU2, ODU2e, ODU2f, ODU4, ODUFlex
framingType	ENUM	Optional	CBR, GFP-F-Fixed
bitRate	NUMBER	Mandatory (IF bandwidth is **ODUFlex**)	
protectionType	ENUM	Mandatory	ONE_PLUS_ZERO, ONE_PLUS_ONE, ONE_PLUS_R, ONE_PLUS_ONE_PLUS_R
protectionProfile	STRING	Optional	
recordRoute	BOOLEAN	Optional	
EndpointData:role	ENUM	Mandatory	AEND, ZEND
EndPointData:PortRef:MD	STRING	Mandatory	The RDN value for the RDN type MD should be CISCO_EPNM
EndpointData:PortRef:ME	STRING	Mandatory	The RDN value for the type ME should be the InstanceId from MtosiManagedElement Table
EndpointData:PorfRef:PTP	STRING	Mandatory	The RDN value for the type PTP should be instanceId from the OpticalProtocolPep table
EndpointData:timeSlot	STRING	Optional	
PathOptionData **The PathOptionData by itself is Optional. The different options that take effect when you specify path options are described below.**			
PathOptionData:index	NUMBER	Mandatory	Indicates the index of the Path Option. This value is assigned by the OSS user for the particular path Option.
PathOptionData:option	ENUM	Optional	PROTECTED, RESTORED, WORKING
PathOptionData:type	ENUM	Mandator	DYNAMIC, EXPLICIT
PathOptionData:protectedBy	NUMBER	Optional	NONE,1,2,…. This value is the index value assigned to a Path option.
PathOptionData:restoredBy	NUMBER	Optional	NONE,1,2,.. This value is the index value assigned to a Path option.

OTN Service Order Data	Data Type	Mandatory / Optional	Description
PathOptionData:name	STRING	Mandatory (IF the PathOptinData :Type is **EXPLICIT**)	Name of the Path Option. Any user defined String can be used. Eg: ME-ONS15454-A to indicate an ME option. OR LINK-755 to Indicate that the Option is a Link Option
PathOptionData:nameId	STRING	Optional	The instance ID of the ME or Link. This is currently not used.
PathOptionData::nameRef::RDN :TEPATH	STRING	Optional	The Value returned from a call to getMPLSTEExplicitPath. The value returned by the TEPATH RDN type has to be supplied here.
ProductName:rdn:SERVICE_TYP E	STRING	Mandatory	ODU_TUNNEL, ODU_UNI

Note:

1. It is mandatory to specify the SERVICE_TYPE RDN in the ProductName FDN.
2. A TRAIL_UNI service can be created between 2 NCS4K nodes which in turn use an underlying network formed by NCS2K nodes. The TRAIL_UNI (as the service is called) will be created between the NCS4K nodes. An OCHNC will be created automatically between the NCS2K nodes.

4.13.3.1.2 OTN Path Options

The Path Options are specified to route the circuit through a particular ME or a LINK by specifying the entity to be included via. Index tags in the Path Options. The Index Tag is used to indicate a particular Path Option. The "protectedBy" and "restoredBy" tags can be used to select a particular Path Option. The example given below gives the Path Option.

```
<pathOptions>
                        <pathOptionData>
                            <index>1</index> <!--  The value given here
indicates an index value assigned by the OSS user to the Path Option -->
                            <option>WORKING</option>
                            <type>DYNAMIC</type>
                            <protectedBy>2</protectedBy> <-- The value given
here indicates the EMS to use the path Option specified by index 2 as
specified below -->
                            <restoredBy>NONE</restoredBy
                        </pathOptionData>
                        <pathOptionData>
                            <index>2</index>
                            <option>PROTECTED</option>
                            <type>EXPLICIT</type>
                            <nameRef>
                             <v12:rdn>
                                <v12:type>MD</v12:type>
                                <v12:value>CISCO-EPNM</v12:value>
                             </v12:rdn>

                             <v12:rdn>


                                                        <v12:type>ME</v12:ty
                    pe>
                                                        <v12:value>ME-
                    1</v12:value>
                                                    </v12:rdn>

                                                    <v12:rdn>

<!-- This value is returned by the call to getMPLSTEExplicitPath -->
                                <v12:type>TEPATH</v12:type>
                                <v12:value>PATH_NAME</v12:value>
                             </v12:rdn>
                            </nameRef>
                </pathOptionData>

                </pathOptions>
```

4.13.3.1.3 TRAIL UNI – UNI Config Parameters

The UNI Configuration parameters are additional attributes that can be provided when creating a TRAIL_UNI service. The format of the uniConfig attribute set is provided below for a reference:

```
            <uniConfig >
                  <protectionType>ONE_PLUS_ONE</protectionType>
                  <priority>HIGH</priority>
                  <validation>NONE</validation>
                  <opticalThreshold>GREEN</opticalThreshold>
                  <allowRegeneration>true</allowRegeneration>
                  <restoration>NONE</restoration>
                  <label>alabel</label>
            </uniConfig >
```

If the uniConfig options are provided it is mandatory to provide all the attributes that are contained inside the uniConfig tags. If the use does not want to provision the uniConfig attributes the option should not be specified.

4.13.3.1.4 TRAIL UNI – UNI Explicit Path

The explicit path option is specified when creating a TRAIL UNI Service.

```
<explicitPath>
         <nameRef>
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO-EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>ME</v12:type>
                  <v12:value>ME-TEST-1</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>TEPATH</v12:type>
                  <v12:value>PATH-1</v12:value>
               </v12:rdn>
         </nameRef>>
         <type>DYNAMIC</type>
         <option>PROTECTED</option>
         <protectedBy></protectedBy>
         <restoredBy>NONE</restoredBy>
   </explicitPath>
```

4.13.3.1.5 OCH Trail Uni Diversity

The OCH Trail UNI diversity parameters are additional attributes that can be provided when creating a TRAIL_UNI service. A diverse circuit reference can be provided using the snippet.

```
<diverseFromCircuitRef>
  <v12:rdn>
        <v12:type>MD</v12:type>
        <v12:value>CISCO-EPNM</v12:value>
  </v12:rdn>
  <v12:rdn>
        <v12:type>CFS</v12:type>
        <v12:value>GreenCircuit</v12:value>
  </v12:rdn>
</diverseFromCircuitRef>
```

The above snippet can be added after the serviceDescription tag.

4.13.3.1.6 DMDM Service Order Data

The following table lists the Order Data and supported values for DWDM services.

DMDM Service Order Data	Data Type	Mandatory / Optional	Description
ciscoOptServiceOrderData	**ciscoOptServiceOrderData**		**Container for Optical service provisioning order data details.**
serviceName	STRING	Mandatory	Maximum 48 characters. ASCII string without blank space.
serviceDescription	STRING	Optional	Description of the Service
adminState	ENUM	Optional	Allowed values are IN_SERVICE and OUT_OF_SERVICE. Default is IN_SERVICE.
EndpointData:role	ENUM	Mandatory	AEND,ZEND
EndpointData:PortRef:MD	STRING	Mandatory	The RDN value for the RDN Type MD should be CISCO_EPNM.
EndpointData:PortRef:ME	STRING	Mandatory	The RDN value for the type ME should be the InstanceId from MtosiManagedElement table.
EndpointData:PortRef:PTP	STRING	Mandatory	The RDN value for the type PTP should be the instanceId from the OpticalProtocolPep Table.
EndpointData:localDropRef::	NamingAttributeType	Mandatory(FOR OCHNC). Optional for Other Service Types (OCHCC , OCH-Trail)	The sequence of RDNs (FDN) to indicate an Endpoint PTP. The Value returned by the getAllPhysicalTerminationPoints API call. This is mandatory for OCHNC.
direction	ENUM	Mandatory	UNIDIRECTIONAL, BIDIRECTIONAL
uni	BOOLEAN	Optional	
protectionType	ENUM	Mandatory	Y_CABLE, SPLITTER, PSM, and NONE.
label	STRING	Optional	The maximum length is 14 characters. The permitted characters are any combination of the following set: [a-z,A-Z,_,-,0-9].
diversity	STRING	Optional	This is the name of an existing circuit.
validation	ENUM	Mandatory	NONE,FULL
opticalThreshold	ENUM	Mandatory (If validation is FULL)	GREEN, YELLOW, ORANGE, RED
opticalThresholdProtected	ENUM	Mandatory (If validation is FULL)	GREEN, YELLOW, ORANGE, RED
restoration	ENUM	Mandatory	NONE, RESTORE, REVERT
revert	BOOLEAN	Mandatory (If restoration is REVERT)	
soakTime	TIME	Mandatory (If restoration is REVERT)	HH:MM:SS (i.e. 01:05:00)

DMDM Service Order Data	Data Type	Mandatory / Optional	Description
priority	ENUM	Mandatory (If restoration is REVERT)	HIGH, PRORITY 1, PRIORTY 2, PRIORITY 3, PRORITY 4 PRIORITY 5, PRIORITY 6, LOW
validationRestoration	ENUM	Mandatory	NONE, FULL, and INHERITED.
opticalThresholdRestoration	ENUM	Optional	GREEN, YELLOW, ORANGE, and RED.
opticalThresholdRestoration Protected	ENUM	Optional	GREEN, YELLOW, ORANGE, and RED.
upstreamChannelPowerOffset	FLOAT	Mandatory (Default = 0)	From -30.0 to +30.0, precision 0.1.
downstreamChannelPowerOffset	FLOAT	Mandatory (Default = 0)	From -30.0 to +30.0, precision 0.1.
frequency	FLOAT	Optional	
width	INT	Mandatory (If frequency is available)	This field is Mandatory, if Frequency is available. The allowed value is 50.
frequencyRequired	BOOLEAN	Optional	
frequencyProtected	FLOAT	Optional	
widthProtected	INT	Mandatory (if frequency is available)	This field is mandatory if frequency is available. The allowed value is 50.
frequencyProtectedRequired	BOOLEAN	Optional	
ignorePathAlarm	BOOLEAN	Mandatory	
allowRegeneration	BOOLEAN	Mandatory	
ConstraintData: constraintName	**STRING**	**Optional/Mandatory**	**The ConstraintData itself is an Optional attribute. When you specify the following fields, the described conditions take effect.**
ConstraintData:constraintRef	NamingAttributeType	Mandatory	A Sequence of RDNs to indicate either of: 1. ME (value returned by the call to getAllManagedElements) – The FDN will contain the RDN sequence: MD and ME 2. OPTICAL_LINK_INTERFACE (Value returned by a call to getAllOpticalLinkInterfaces. The Id given to the RDN should indicate a Link Record) – The FDN will contain the RDN sequence : MD and the OPTICAL_LINK_INTERFACE
ConstraintData:constraintAs	ENUM	Mandatory	INCLUDE and EXCLUDE.
ConstraintData:route	ENUM	Mandatory	WORK, PROTECTED, and WORK_AND_PROTECTED.
ProductName:rdn:SERVICE_TYPE	STRING	Mandatory	ODU_TUNNEL and ODU_UNI.

Note:

1. The sequence of the constraints must be maintained.
2. The productInfo must contain a valid productName. The ProductName RDN should contain the SERVICE_TYPE as one of the RDNs. The RDN value for the RDN type “SERVICE_TYPE” must be OCH-Trail, or OCHNC, or OCHCC.

4.13.3.1.7 DMDM Service Constraints

The constraints can be specified to include or exclude an ME or a Link.

4.13.3.1.7.1 NE Constraints

This type of constraint allows an OSS to specify if a Managed ELement needs to be INCLUDED or EXCLUDED while creating a DWDM service.

```
<constraintsData>
                                <constraintName>ONS15454-TURIN</constraintName>
                                <constraintRef>
                                    <v12:rdn>
                                        <v12:type>MD</v12:type>
                                        <v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                 <v12:rdn>
                                    <v12:type>ME</v12:type>
                                    <v12:value>607629</v12:value>
                                 </v12:rdn>
                                </constraintRef>
                                <constraintAs>INCLUDE</constraintAs>
                                <route>WORK</route>
</constraintsData>
```

The XML Tag **<constraintAs>EXCLUDE</constraintAs>** contains indications to the EMS to either INCLUDE or EXCLUDE a particular Constraint. The Below constraint example indicates to the EMS to INCLUDE a particular NE identified by the ID "607629" when creating a DWDM service.

4.13.3.1.7.2 Link Constraints

The Link Constraint can be specified by the OSS to either INCLUDE or EXCLUDE a particular link endpoint when creating /provisioning a DWDM service. The RDN value specified for the RDN type **OPTICAL_LINK_INTERFACE** is the value returned by the API getAllOpticalLinkInterfaces. The value indicates an Optical Interface Endpoint where the Link is terminating. The API returns a set of Nodes and Links. The OSS user will have to select the links and pass those IDs as part of the RDN. The discoveredName attribute can be used to identify if the entity is a Link or a Node.

For example:

```
    <constraintsData>
                            <constraintName>LINK_778</constraintName>
                            <constraintRef>
                                <v12:rdn>
                                    <v12:type>MD</v12:type>
                                    <v12:value>CISCO_EPNM</v12:value>
                                </v12:rdn>
                             <v12:rdn>
```

```
                    <v12:type>OPTICAL_LINK_INTERFACE</v12:type>
                    <v12:value>942520</v12:value>
                  </v12:rdn>
                </constraintRef>
                 <constraintAs>EXCLUDE</constraintAs>
                 <route>WORK</route>

  </constraintsData>
```

This Constraint indicates to the EMS to exclude a link terminating on the protocol Endpoint indicated by the ID **942520**.

4.13.3.1.8 DMDM Channel to Frequency Mapping Grid

The table below gives the mapping between the Channel and the Frequency. The frequency should be used while provisioning the DWDM service based on the channel selected for the endpoints.

Channel (#)	Frequency (GHz)	Wavelength (nm)	Channel (#)	Frequency (GHz)	Wavelength (nm)
1	190100	1577.03	37	193700	1547.72
2	190200	1576.20	38	193800	1546.92
3	190300	1575.37	39	193900	1546.12
4	190400	1574.54	40	194000	1545.32
5	190500	1573.71	41	194100	1544.53
6	190600	1572.89	42	194200	1543.73
7	190700	1572.06	43	194300	1542.94
8	190800	1571.24	44	194400	1542.14
9	190900	1570.42	45	194500	1541.35
10	191000	1569.59	46	194600	1540.56
11	191100	1568.11	47	194700	1539.77
12	191200	1567.95	48	194800	1538.98
13	191300	1567.13	49	194900	1538.19
14	191400	1566.31	50	195000	1537.40
15	191500	1565.50	51	195100	1536.61
16	191600	1564.68	52	195200	1535.82
17	191700	1563.86	53	195300	1535.04
18	191800	1563.05	54	195400	1534.25
19	191900	1562.23	55	195500	1533.47
20	192000	1561.42	56	195600	1532.68
21	192100	1560.61	57	195700	1531.90
22	192200	1559.79	58	195800	1531.12
23	192300	1558.98	59	195900	1530.33
24	192400	1558.17	60	196000	1529.55
25	192500	1557.36	61	196100	1528.77

26	192600	1556.56	62	196200	1527.99
27	192700	1555.75	63	196300	1527.22
28	192800	1554.94	64	196400	1526.44
29	192900	1554.13	65	196500	1525.66
30	193000	1553.33	66	196600	1524.89
31	193100	1552.52	67	196700	1524.11
32	193200	1551.72	68	196800	1523.34
33	193300	1550.92	69	196900	1522.56
34	193400	1550.12	70	197000	1521.79
35	193500	1549.32	71	197100	1521.02
36	193600	1548.52	72	197200	1520.25

4.13.3.2 *Carrier Ethernet Service Order Data*

The following table lists the Order Data elements and the supported values for Carrier Ethernet Services. Note that the table below describes all the elements in service order data combined for service and endpoint configuration for all the CE Services (ELINE, ELAN, ETREE, EACCESS).

Before using this API to provision CE Services, there are some prerequisites that must be met in Cisco EPN Manager as well as the devices used for provisioning. Please refer to the User and Administration guide for Cisco EPN Manager for details on the prerequisites.

The following table describes the containers of CE service order data and Cisco specific vendor extension that holds the order data for provisioning:

Carrier Ethernet Service Order Data	**Data Type**	**Applicable to Service Type**	**Description**
serviceName	String	All	Unique name to identify the circuit/VC.
serviceDescription	String	All	Description of the VC that will help to identify the VC.
coreTechnology	String	EP-LAN, EVP-LAN, EP-TREE, EVP-TREE	Core technology. Values: EP-LAN, EVP-LAN : **H-VPLS or VPLS** EP-TREE, EVP-TREE: **H-VPLS**
bundling	Boolean	VLAN-based VCs	Enables multiple VLANs on this VC. Multiple CE-VLAN IDs are bundled to one EVC.
ccmInterval	String		Service-wide setting for all Maintenance Entities – e.g. 1 sec, …
ceVlanIdPreservation	Boolean	VLAN-based VCs	CE-VLAN ID Preservation. Ensures that the CE-VLAN ID of an egress service frame is identical in value to the CE-VLAN ID of the corresponding ingress service frame. This must be enabled if bundling is enabled.

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
ceVlanCosPreservation	Boolean	VLAN-based VCs	CE-VLAN ID CoS Preservation. Ensures that the CE-VLAN CoS of an egress service frame is identical in value to the CE-VLAN CoS of the corresponding ingress service frame. The CoS markings are unaltered.
mtuSize	Integer	All	Service MTU. The maximum size, in bytes, of any frame passing through the VC. Values can be between 1522 and 9216. The service MTU must be lower than or equal to the MTU defined on the UNI.
faultManagementMap	FaultManagementMapType	All	Service OAM - Define the probe profiles between MEP Groups (groups of UNIs whose membership to a group is marked at each endpoint). See the entries in this container below in Fault Managmeent Map Data.
maxUniEndpoints	Integer	All	Max Uni endpoints – 2.
aEndEpDataList	EndpointDataListType	All	List of A End Endpoints Data: • For EVP-LAN service, more than one endpoint can be specified here as part of Multi-Uni service provisioning. • For all other services except for EVP-LAN service, this container supports only one endpoint.
zEndEpDataList	EndpointDataListType	All except E-LAN and E-Tree types	List of Z End Endpoints Data.

The following table lists the containers for Fault Management map entries applicable to different types of fault management maps:

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
Fault Management Map Data	FaultManagementMapType		Container for Fault Management Map Entries
entry	FaultManagementMapEntryType		Zero or more elements of the FaultManagementMapEntryType.
Fault Management Map Entry Data	FaultManagementMapEntryType	All	Container of the entries for Fault Management Map
From	String	All	Value should be one of - ENNI Z, UNI Z, UNI A, ENNI A. The source of the traffic flow across the EVC/OVC.
To	String	All	Value should be one of - ENNI Z, UNI Z, UNI A, ENNI A. The destination of the traffic flow across the EVC/OVC.

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
CoS	String	All	Values: • EXTRA HIGH • HIGH • HIGHEST AVAILABLE • LOW • MEDIUM The Class of Service identifier that should be associated with the frame.
OAMProfile	String	All	Provide a name to the profile that can be identified for the set of OAM attributes that should be applied to the frame to enable performance monitoring. Note: this is just a label. The actual values should be passed through CChk, SEDM, DEDM, SyLM elements mentioned below. For example, – Performance Monitoring 1: Enables continuity check and synthetic loss measurement. (CChk=Yes, SEDM= No, DEDM=No, SyLM=Yes, SLM=No). – Performance Monitoring 2: Enables continuity check, synthetic loss measurement, and single-ended delay measurement (CChk=Yes, SEDM= Yes, DEDM=No, SyLM=Yes, SLM=No). – Performance Monitoring 3: Enables continuity check, synthetic loss measurement, and dual-ended delay measurement (CChk=Yes, SEDM= No, DEDM=Yes, SyLM=Yes, SLM=No).
CChk	String	All	Value=Yes Enables continuity checks between source and destination. Continuity checks are always enabled. Always set to yes.
SEDM	String	All	Value=Yes/No Creates a single ended delay measurement (1/2 the time of a ping).
DEDM	String	All	Value=Yes/No Creates a dual ended delay measurement which relies on clocks being synchronized.
SyLM	String	All	Value=Yes/No Creates a Synthetic loss measurement, send packets to see if any are lost.
SLM	String	All	Value=Yes/No Creates a Service loss measurement, regularly send counts of how many service packets were sent so far. Receiving end counts received packets and so can detect loss.

The following table describes the different endpoint data types and lists the services they are applicable to:

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
Endpoint Data List Data	EndpointDataListType	All	Container for the Endpoint Data containers
endpontData	EndpointDataType	All	Zero or more elements of type EndpointDataType.
Endpoint Data	EndpointDataType	All	Container for Endpoint data.
portRef	NamingAttributeType	All	FDN of the port to use - set of RNDs that consists of MD, ME and PTP or FTP instance ids. For example: <portRef> <rdn><type>MD</type><value>CISCO_EPNM</value></rdn> <rdn><type>ME</type><value>879509</value></rdn> <rdn><type>PTP</type><value>989760</value></rdn> </portRef>
createUni	Boolean	All	Set to true to create new uni
uniMepGroup	String	ELINE, E-LAN	Name of the Mep Group – UNI A or UNI Z. For CFM configuration, specify the group to which this endpoint belongs. Based on your selection, a CFM service will be created and a MEP ID will be assigned.
uniRef	NamingAttributeType	All	FDN of the existing uni – set of RENs that consists of MD, UNI instance ids. For example <uniRef> <rdn><type>MD</type><value>CISCO_EPNM</value></rdn> <rdn><type>UNI</type><value>my_a_end_uni</value></rdn> </uniRef>
uniName	String	All	Name of the new uni to be created.
uniDescription	String	All	Description of the new uni to be created.
createEnni	Boolean	Access EPL, Access EVPL	Set to true to create new ENNI.
enniMepGroup	String	Access EPL, Access EVPL	Name of the Mep Group for the ENNI. Values: ENNI Z.
enniRef	NamingAttributeType	Access EPL, Access EVPL	FDN of the existing enni – set of RENs that consists of MD, ENNI instance ids. For example <uniRef> <rdn><type>MD</type><value>CISCO_EPNM</value></rdn> <rdn><type>ENNI</type><value>my_z_end_enni</value></rdn> </portRef
enniName	String	Access EPL, Access EVPL	Name of the new ENNI to be created.

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
l2cpProfile	String	All except EVPL	Layer 2 Control Protocol Profile. Profile that determines how the various communication protocols are handled. Frames using the various protocols are tunneled, or dropped or peered. Refer to MEF 6.1 for details. Values: EPL, Access EPL : MEF Option1 or MEF Option2 Access EVPL: EVPL/EVP-LAN/EVP-Tree EP-LAN, EP-Tree : MEF EP-LAN/EP-Tree EVP-LAN, EVP-Tree: MEF EVPL/EVP-LAN/EVP-Tree
qosProfile	NamingAttributeType	All except EVP-Tree	Service QOS Profile Reference. FDN of the existing QOS profile with MD, QOS_PROFILE RDNs.
uniQosProfileRef	NamingAttributeType	E-LAN, E-TREE	Uni QoS Profile reference. FDN of the existing QOS profile with MD, QOS_PROFILE RDNs. Applies a QoS profile on the UNI itself to define the bandwidth profile and other quality of service attributes of the UNI. If you apply a QoS profile on the UNI level, you should not apply a QoS profile on the service level.
portMtuSize	Integer	All	The Maximum Transmission Size, in bytes, of a packet passing through the interface. The MTU of the UNI must be greater than or equal to the MTU defined on the service level.
portSpeedRate	String	All	Port speed. You can reduce the speed if this is supported on the port.
portMode	String	All	Mode – values: • FULL DUPLEX—Uses simultaneous communication in both directions between the UNI and the customer's access switch, assuming that both sides support full duplex. If one side does not support full duplex, the port will be brought down. • AUTO NEGOTIATION —Uses the mode that is agreed upon between the two devices, depending on what is supported. Full Duplex will be attempted but if one device does not support it, half duplex will be used.
portEnableLinkManagement	Boolean	All	Enables the customer access switch to get information about this UNI, VLAN IDs, and services on the UNI, and so on.
portEnableLinkOAM	Boolean	All	Enables IEEE 803.1ah link operation and maintenance. If Link OAM is enabled, you will see events relating to the state of the link between this UNI and the customer's access switch.
vlanIdList	String	VLAN-based VCs	Customer VLAN(s) – e.g. 100,120-155. An ID or range of IDs of the VLAN(s) to be used for the VC.
svlanIdList	String	Access EPL, Access EVPL	Service vlan Id List.

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
ceVlanId	String	VLAN-based VCs	Untagged CE-VLAN ID – e.g. 1333. The ID of the CE-VLAN assigned to untagged traffic.
untagged	Boolean	VLAN-based VCs	Untagged – true/false. Preserves a VLAN ID for untagged traffic. If there is no bundling, only one VLAN is allowed, therefore, if the Untagged check box is checked, you cannot specify and additional VLAN ID.
serviceMultiplexing	Boolean	VLAN-based VCs	Allows the UNI to participate in more than one EVC instance.
uniBundling	Boolean	VLAN-based VCs	UNI Allows Bundling. Allows the use of multiple VLANs for this UNI.
primaryHub	NamingAttributeType	EP-LAN, EVP-LAN, EP-TREE, EVP-TREE	H-VPLS Hub - Primary Hub. MTOSI FND value of the Managed Element (consists of MD, ME RDNs).
backupHub	NamingAttributeType	EP-LAN, EVP-LAN, EP-TREE, EVP-TREE	H-VPLS Hub - Backup Hub. MTOSI FND value of the Managed Element (consists of MD, ME RDNs).
designation	String	EP-TREE, EVP-TREE	Designation. Select the role of the UNI in the VC. Values: Root or Leaf.
operatorRef	NamingAttributeType	Access EPL, Access EVPL	FDN of the customer object – set of RDN types with MD, CUSTOMER.
protectionMechanism	String	Access EPL, Access EVPL	Protection Mechanism. Specify a protection mechanism if ENNI comprises of more than one port. Values: None, Link Aggregation, and other.
frameFormat	String	Access EPL, Access EVPL	Frame Format Values: Double Tagged.

The following table describes the match and advances criteria for the QinQ Configuration (applicable to only EVPL, Access EVPL, EVP-LAN):

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
Match Criteria			
matchType	MatchTypeEnumType	EVPL, Access EVPL, EVP-LAN	Possible Values: default, dot1q, dot1ad, and untagged.
vlanIdList	String	EVPL, Access EVPL, EVP-LAN	Outer VLANs. The VLAN or range of VLANs to be used for this service, e.g. 12 or 123-145,155.
innerVlanIdList	String	EVPL, Access EVPL, EVP-LAN	Inner VLANs The VLAN or range of VLANs to be used, e.g. 12 or 123-145,155.

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
Advanced Options			
untagged	Boolean	EVPL, Access EVPL, EVP-LAN	Allow the service frames to be untagged (one service allowed per UNI).
priorityTagged	Boolean	EVPL, Access EVPL, EVP-LAN	
matchExact	Boolean	EVPL, Access EVPL, EVP-LAN	
vlanCoS	String	EVPL, Access EVPL, EVP-LAN	Outer VLAN CoS
innerVlanCoS	String	EVPL, Access EVPL, EVP-LAN	Innter VLAN CoS
etherType	EthterType TYpe	EVPL, Access EVPL, EVP-LAN	Container for EtherType options that holds following elements: ipv4, ipv6, pppoeAll, pppoeDiscovery, and pppoeSession.
ipv4	Boolean	EVPL, Access EVPL, EVP-LAN	Ethertype - ipv4
ipv6	Boolean	EVPL, Access EVPL, EVP-LAN	Ethertype -ipv6
pppoeAll	Boolean	EVPL, Access EVPL, EVP-LAN	Ethertype -pppoeAll
pppoeDiscovery	Boolean	EVPL, Access EVPL, EVP-LAN	Ethertype -pppoeDiscovery
pppoeSession	Boolean	EVPL, Access EVPL, EVP-LAN	Ethertype - pppoeSession
rewriteDefinition	RewriteDefintionType	EVPL, Access EVPL, EVP-LAN	Container element for Rewrite Definition (Advanced Frame Manipulation). Contains the following elements: popOperation, pushOperation, and translateOperation.
popOperation	popOperationType	EVPL, Access EVPL, EVP-LAN	pop action configuration container element.
pushOperation	pushOperationType	EVPL, Access EVPL, EVP-LAN	push action configuration container element.
translateOperation	translateOperationType	EVPL, Access EVPL, EVP-LAN	translate action configuration container element.

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
tagCount	TagCountEnumType	EVPL, Access EVPL, EVP-LAN	Values: one and two. Child element of popOperation and pushOperation.
tagTranslation	TagTranslationEnumType	EVPL, Access EVPL, EVP-LAN	Values: one-to-one, one-to-two, two-to-one, two-to-two Child element of translateOperation.
matchType	MatchTypeType	EVPL, Access EVPL, EVP-LAN	Values: dot1q and dot1ad. Child element of pushOperation, translateOperation.
innerVlanId	String	EVPL, Access EVPL, EVP-LAN	VLAN ID Child element of pushOperation, translateOperation
outerVlanId	String	EVPL, Access EVPL, EVP-LAN	VLAN ID Child element of pushOperation, translateOperation.

The following table describes the elements for adding and removing the UNI as part of the modify operation of ELAN and ETREE services:

Carrier Ethernet Service Order Data	Data Type	Applicable to Service Type	Description
uniModifyOperation	String	EP-LAN, EVP-LAN, EP-TREE, EVP-TREE	Operation type on a modify request for a ELAN and ETREE service to add or remove or update UNI. Valid values: add, remove, update In case of ELAN services, this element should present inside each endpoint data to add/remove or update that specific endpoint. For ETREE services, this element should be present along with uniRefList below in order data.
uniRefList	UniRefListType	EP-TREE, EVP-TREE	Container element to hold the UNI references used in add/remove UNIs in modify request of ETREE services. Should contain uniRef elements list. For example: <uniList> <uniRef> <rdn><type>MD</type><value>CISCO_EPNM</value></rdn> <rdn><type>UNI</type><value>my_endpoint_uni</value></rdn> </uniRef> <uniList>

4.13.3.2.1 QinQ Configuration in Order data

QinQ Configuration of the endpoints in the order data is supported only for EVPL and Access EVPL, EVP-LAN services.

4.13.3.2.2 Multi-UNI Configuration in Order data

For E-LAN Services provisioning, adding multiple UNIs as part of the Endpoint configuration is supported. The configuration for each UNI should be added as each AEnd Endpoint under the AEndEndpointList container element.

Note: EP-Tree, EVP-Tree only supports single UNI configuration in order data

The following request xml snippet shows how the multiple UNI configurations can be specified for EVP-LAN service provisioning.

```
<ciscoCeServiceOrderData>
   <!-- service configuration -->
    <serviceName>EvpLanSevice1</serviceName>
    <coreTechnology>VPLS</coreTechnology>
    ...
    ...
    <!--==== Multi Uni/Endpoints Configuration ==== -->
    <aEndEpDataList>
        <endpointData>
            <uniModifyOperation>add</uniModifyOperation>
            <portRef/>
            <uniName>uni1</uniName>
            ...
            ...
        </endpointData>
        <endpointData>
            <uniModifyOperation>add</uniModifyOperation>
            <portRef/>
            <uniName>uni2</uniName>
            ...
            ...
        </endpointData>
        <endpointData>
            <portRef/>
            <uniName>uni3</uniName>
            ...
            ...
        </endpointData>

    </aEndEpDataList>
</ciscoCeServiceOrderData>
```

4.13.3.3 *Carrier Ethernet Endpoint Service Order Data*

The following table lists the Order Data elements and the supported values for Carrier Endpoint Services (UNI, ENNI). Note that the table below describes all the elements in service order data combined for service and endpoint configuration for all the CE Endpoint Services (UNI, ENNI).

Before using this API to provision CE Services, there are some prerequisites that must be met in Cisco EPN Manager as well as the devices used for provisioning. Please refer to the User and Administration guide for Cisco EPN Manager for details on the prerequisites.

4.13.3.3.1 Carrier Ethernet UNI Endpoint Service Order Data

The UNI Service Order Data can be used to create an individual UNI service.

Carrier Ethernet Endpoint Service Order Data	Data Type	Applicable to ServiceType	Description
ciscoCeEPServiceOrderData	**CiscoCeEPServiceOrderDataType**	**UNI**	**Container for Carrier Ehternet Endpoint Service Order Data. Cisco specific verndor extension that holds the order data for provisioning**
serviceName	String	UNI	Unique name to identify the circuit/VC.
serviceDescription	String	UNI	Description of the Service
Endpoint Data	**EndpointDataType**	**UNI**	**Container for Endpoint data.**
portRef	NamingAttributeType	UNI	FDN of the port to use - set of RNDs that consists of MD, ME and PTP or FTP instance ids. For example: <portRef> <rdn><type>MD</type><value>CISCO_EPNM</value></rdn> <rdn><type>ME</type><value>879509 </value></rdn> <rdn><type>PTP</type><value>989760 </value></rdn> </portRef>
uniName	String	UNI	Name of the new UNI to be created.
uniDescription	String	UNI	Description of the new UNI to be created.
qosProfile	NamingAttributeType	UNI	Service QOS Profile Reference. FDN of the existing QOS profile with MD, QOS_PROFILE RDNs.
portMtuSize	Integer	UNI	The Maximum Transmission Size, in bytes, of a packet passing through the interface. The MTU of the UNI must be greater than or equal to the MTU defined on the service level.
portSpeedRate	String	UNI	Port speed. You can reduce the speed if this is supported on the port.
portMode	String	UNI	Mode values: • FULL DUPLEX—Uses simultaneous communication in both directions between the UNI and the customer's access switch, assuming that both sides support full duplex. If one side does not support full duplex, the port will be brought down. • AUTO NEGOTIATION —Uses the mode that is agreed upon between the two devices, depending on what is supported. Full Duplex will be attempted but if one device does not support it, half duplex will be used.

Carrier Ethernet Endpoint Service Order Data	Data Type	Applicable to ServiceType	Description
portEnableLinkManagement	Boolean	UNI	Enables the customer access switch to get information about this UNI, VLAN IDs, and services on the UNI, and so on.
portEnableLinkOAM	Boolean	UNI	Enables IEEE 803.1ah link operation and maintenance. If Link OAM is enabled, you will see events relating to the state of the link between this UNI and the customer's access switch.
ceVlanId	String	VLAN-based VCs	Untagged CE-VLAN ID – e.g. 1333. The ID of the CE-VLAN assigned to untagged traffic.
serviceMultiplexing	Boolean	VLAN-based VCs	Allows the UNI to participate in more than one EVC instance.
uniBundling	Boolean	VLAN-based VCs	UNI Allows Bundling. Allows the use of multiple VLANs for this UNI.

4.13.3.3.2 Carrier Ethernet ENNI Endpoint Service Order Data

The ENNI Service Order Data can be used to create and individual ENNI service.

Carrier Ethernet Endpoint Service Order Data	Data Type	Applicable to ServiceType	Description
ciscoCeEPServiceOrderData	**CiscoCeEPServiceOrderDataType**	**ENNI**	**Container for Carrier Ehternet Endpoint Service Order Data. Cisco specific verndor extension that holds the order data for provisioning**
serviceName	String	ENNI	Unique name to identify the circuit/VC.
serviceDescription	String	ENNI	Description of the Service
Endpoint Data	**EndpointDataType**	**ENNI**	**Container for Endpoint data.**
portRef	NamingAttributeType	ENNI	FDN of the port to use - set of RNDs that consists of MD, ME and PTP or FTP instance ids. For example: <portRef> <rdn><type>MD</type><value>CISCO_EPNM</value></rdn> <rdn><type>ME</type><value>879509 </value></rdn> <rdn><type>PTP</type><value>989760 </value></rdn> </portRef>
enniName	String	ENNI	Name of the new ENNI to be created.
enniDescription	String	ENNI	Description of the new ENNI to be created.
qosProfile	NamingAttributeType	ENNI	Service QOS Profile Reference. FDN of the existing QOS profile with MD, QOS_PROFILE RDNs.

Carrier Ethernet Endpoint Service Order Data	Data Type	Applicable to ServiceType	Description
portMtuSize	Integer	ENNI	The Maximum Transmission Size, in bytes, of a packet passing through the interface. The MTU of the UNI must be greater than or equal to the MTU defined on the service level.
portSpeedRate	String	ENNI	Port speed. You can reduce the speed if this is supported on the port.
protectionMechanism	String	ENNI	Protection Mechanism. Specify a protection mechanism if ENNI comprises of more than one port. Values: None, Link Aggregation, and other.

4.13.3.4 *Carrier Ethernet QoS Profile Service Order Data*

The QoS Profile data can be used to create individual QoS Profiles.

Carrier Ethernet QoS Profile Order Data	Data Type	Applicable to Profile Type	Description
ciscoCeQoSProfileOrderData	**CiscoCeQoSProfileOrderDataType**	**QoSProfile**	**Container for Carrier Ehternet QoS Profile Order Data. Cisco specific verndor extension that holds the order data for provisioning**
qosProfileName	String	**QoSProfile**	Name of the QoS Profile.
applyToInterfaces	Boolean	QosProfle	Indicates if the profile has to be applied to Interfaces.
applyToVirtual	Boolean	QoSProfile	-
applyToPrivate	Booleab	QosProfile	-
qosClassification	String	QosProfile	-
qosOperationType	String	QosProfile	-
Bandwidth Profile List Type	QoSBWProfileList	QosProfile	Container of Bandwidth Profiles.
ciscoQoSBWProfile	CiscoQoSBWProfile	QoSProfile	Contains the BW Profile Information.
qosBWProfileType	String	QoSProfile	Enumerated Type: EX_HIGH_BW_PROFILE HIGH_BW_PROFILE MEDIUM_BW_PROFILE LOW_BW_PROFILE
qosBWProfileAllowed	Boolean	QoSProfile	Indicates if the BW Profile is allowed.
qosBWProfileMatchCriteria	String	QoSProfile	Indicates the match criteria for the QoS BW Profile.
qosBWProfile	QoSBWProfile	QoSProfile	Container of BW Profile Attributes.
className	String	QoSProfile	Indicates the QoS Profile Class Name.
direction	String	QoSProfile	Indicates the direction
matchValue	String	QoSProfile	Match value String

Carrier Ethernet QoS Profile Order Data	Data Type	Applicable to Profile Type	Description
cir	String	QoSProfile	Indicates the CIR value
cbs	String	QoSProfile	Indicates the CBS value
eir	String	QoSProfile	Indicates the EIR value
ebs	String	QoSProfile	Indicates the EBS value
colorMode	String	QoSProfile	Indicates the color mode
coupling	String	QoSProfile	Indicates coupling

4.13.4 Operations

4.13.4.1 *Provision*

The API allows an OSS/NMS to provision Optical and Carrier Ethernet services using Cisco EPN Manager. This operation provisions the CFSs in support of a product instance. When this request is complete, each CFS (associated with the product instance) should be in the Provisioned_Active state, with all associated RFSs (and subtending resources) configured and allocated to the appropriate CFS.

Pre-condition(s): The CFSs supporting the product instance must not yet exist.

Post-condition(s): In case of success, the CFS(s) associated with the product instance will be in the Provisioned_Aactive state. If an atomic request fails, all CFS(s) will be returned to their original state (before the service request). The best effort is that the CFSs associated with the product instance remain in their current state; no rollback is attempted in this case.

Note: This API will provision and activate the specified service.

4.13.4.1.1 Optical Services

The Optical customer facing services (CFS) can be provisioned for Optical Transport Network (OTN) and Dense Wavelength Division Multiplexing (DWDM) services.

4.13.4.1.2 Carrier Ethernet Services

The Carrier Ethernet customer facing services (CFS) can be provisioned for ELINE, ELAN, ETREE, and EACCESS Services.

4.13.4.1.3 Service Input Data

The Input data for provisioning services are set in the productInfoType and the Cisco-specific vendor extensions in basicInput. The following table describes the standard data types. The Service Order Data Tables above in this section provides details of the data required to provision services and corresponding example request and responses are provided in the Appendix of this guide.

4.13.4.1.4 Input

Request parameter	Data Type	Description
provisionRequest	provisionRequest	Details of the provision request.
basicInput	RequestInfoBasicType	vendorExtensions which will hold the order data required for provisioning. (Details of the XML data is provided in Appendix.)

Request parameter	Data Type	Description
orderData	OrderDataType	Cisco-specific vendor extension that holds the order data for provisioning. Refer the Service Order Data tables for the detailed data description.
productInfo	ProductInfoType	ServiceType of the service requested.
subscriberRefList	NamingAttributeType	List of RDN types as a customer object id.
soaInput	RequestInfoSOAwareType	Service Order Aware Type. Although this is a mandatory field in the data model, Cisco EPN Manager does not process this data.
requestedCompletionDate	dateTime	Not used. Should be set to current date.
Priority	Integer	Not used. Should be set to 0.
purchaseOrder	String	Not used. Can be set to NONE.
validFor	dateTime	Not used. Should be set to current date.

4.13.4.1.5 Provision Response

Multiple responses to a request are possible, unless there is an exception. The expectation is to have one instance of the initialResponse and beginProcessingEvent, and multiple instances of success and failure responses. The header of the last response will indicate success or failure.

4.13.4.1.6 Output

Request parameter	Data Type	Description
provisionResponse	provisionResponse	Details of the provisioned service(s).
beginProcessingEvent	BeginProcessingEventType	Returned if the provisioning process takes more than default wait time for completing the provisioning. **Note:** After the response is returned, the provisioning process runs in background and user will be notified of completion results using notification producer interface.
cfsCreation	CfsCreationEventType	Indicates that CFS creation is successful.
serviceCreationFailureEvent	ServiceCreationFailureEventType	Indicates partial failure scenario.

4.13.4.1.7 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.13.4.2 *modify*

The API allows an OSS/NMS to modify a previous provisioning request. This operation takes the CFS reference and the corresponding modified service order data and modifies the existing CFS. When this request is complete, each CFS (associated with the product instance) should be in the targetState (Provisioned_Active), with all associated RFSs (and subtending resources) configured and allocated to the appropriate CFS.

Pre-condition(s): The CFSs supporting the product instance must exist.

In case of success, the CFS(s) associated with the product instance will be in the targetState (Provisioned_Active). Subscribers, users, and SAPs will be added or deleted as indicated in the modify request.

In case of failure: In the case of an atomic request, all CFS(s) will be returned to their original state before the service request. Also, no subscriber, users or SAPs will be added or deleted. The best effort is that the CFSs associated with the product instance remain in their current state; no rollback is attempted in this case.

4.13.4.2.1 Input

Request parameter	Data Type	Description
modifyRequest	modifyRequest	-
basicInput	RequestInfoBasicType	-
productInfo	ProductInfoType	Product information associated with request. The target OS will translate the product information to service-level information and perform the requested action.
subscriberRefList	NamingAttributeType	List of RDN types as a customer object id.
targetState	String	State to which the target OS wants the CFSs transitioned when the request is complete (the value is either Provisioned_Inactive or Provisioned_Active).

4.13.4.2.2 Modify Response

Multiple responses to a request are possible, unless there is an exception. The expectation is to have one instance of the initialResponse and beginProcessingEvent, and multiple instances of success and failure responses. The header of the last response will indicate success or failure.

4.13.4.2.3 Output

Response parameter	Data Type	Description
modifyResponse	modifyResponse	Details of the modified service(s).
beginProcessingEvent	BeginProcessingEventType	Indication that the target OS has removed the request from the queue and has started to work on the request.
cfsCreation	CfsCreationEventType	Indication that CFS modified/creation is successful.
cfsAvcChange	CfsAvcEventType	Indication that the target OS has changed the attributes of one or more CFSs. It is also possible to add and delete attributes.
serviceCreationFailureEvent	ServiceCreationFailureEventType	Indicates partial failure scenario. This event is an indication that the target OS could not create a CFS (in support of a given product instance).
serviceStateTransitionFailureEvent	ServiceStateTransitionFailureEventType	Indicates partial failure scenario. This event is an indication that the target OS is reporting a CFS state transition failure from the current state to the next one in the CFS activation lifecycle.

4.13.4.2.4 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.13.4.3 *Terminate*

This API allows an OSS/NMS to terminate a previously-performed provision request. This operation terminates the CFSs in support of a product instance. When this request is complete, each CFS (associated with the product instance) should be in the Terminated state. The RFSs (that once supported the CFSs) will be disassociated from the CFSs and made available for use in other situations.

Pre-condition(s): The CFSs supporting the product instance must be in the Provisioned_Active state.

Post-condition(s): In case of success, the CFS(s) associated with the product instance will be in the Terminated state. If an atomic request fails, all CFS(s) will be returned to their original state before the service request. The best effort is that the CFSs associated with the product instance remains in their current state; no rollback is attempted in this case.

4.13.4.3.1 Input

Request parameter	Data Type	Description
terminateRequest	terminateRequest	Information about service termination.
rootRequest	RootRequestType	
VendorExtensions	AnyListType	Vendor extensions required for this request.
productName	NamingAttributeType	Name of product associated with terminate request.
soaInput	RequestInfoSOAwareType	Service Order Aware Type. Not used in request processing, but mandatory in request data.
requestedCompletionDate	dateTime	Not used. Initialize with current date.
Priority	Integer	Not used. Initialize with 0.
purchaseOrder	String	Not used. Initialize with “NONE”.
validFor	dateTime	Not used. Initialize with current date.

4.13.4.3.2 Terminate Response

Multiple responses to a request are possible, unless there is an exception. The expectation is to have one instance of the initialResponse and beginProcessingEvent, and multiple instances of success and failure responses. The header of the last response will indicate success or failure.

4.13.4.3.3 Output

Response parameter	Data Type	Description
terminateResponse	terminateResponse	Details of the terminated service(s).
beginProcessingEvent	BeginProcessingEventType	Indicates that target OS has removed the request from the queue and has started to work on the request.
cfsStateChange	CfsStateChangeEventType	Indicates that target OS has progressed one or more CFSs from one state to another state.
serviceStateTransitionFailureEvent	ServiceStateTransitionFailureEventType	Indicates partial failure scenario.

4.13.4.3.4 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.13.4.4 *activate*

This API allows an OSS/NMS to set the adminState of a service to UP. Upon a successful update of the adminState the specified service will be re-deployed on the network.

Pre-condition(s): The CFS supporting the product instance must be in the Provisioned_Active state.
The CFS should be created by the EPNM system and to be in discovered State.
The CFS should be having the adminStatus as DOWN

Post-condition(s): In case of success, the admin Status of the CFS associated with the product instance will be in UP State. If the request fails, the CFS will be returned to their original state before the service request. The use will receive a ServiceStateTransition Failure in the response.

4.13.4.4.1 Input

Request parameter	Data Type	Description
activateRequest	activateRequst	Information about service activation
basicInput	BasicInputType	
VendorExtensions	AnyListType	Vendor extensions required for this request.
productName	NamingAttributeType	Name of product associated with terminate request.
soaInput	RequestInfoSOAwareType	Service Order Aware Type. Not used in request processing, but mandatory in request data.
productSpecificationName	NamingAttributeType	Not used. Ignored
productBundleName	NamingAttributeType	Not used. Ignored
productSpecCharacteristicRef	NamingAttributeType	Not used. Ignored
productCharacteristicValue	String	Not used. Ignored
subscriberRefList	NamingAttributeType	Not used. Ignored
userRefList	NamingAttributeType	Not used. Ignored
sapRefList	NamingAttributeType	Not used. Ignored

4.13.4.4.2 Activate Response

Upon success, a CFS creation will be sent as part of the response. A CFS State Transition Event will be generated as part of a successful response. Upon a failure, A CFS State Transition Failure Event will be generated as part of an un-successful response.

4.13.4.4.3 Output

Response parameter	Data Type	Description
terminateResponse	terminateResponse	Details of the terminated service(s).
cfsStateChange	CfsStateChangeEventType	Indicates that target OS has progressed one or more CFSs from one state to another state.
serviceStateTransitionFailureEvent	ServiceStateTransitionFailureEventType	Indicates partial failure scenario.

4.13.4.4.4 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

NOTE: The API is generally used to activate a Service. In this case the API is specifically used to turn the AdminStatus of the CFS to UP. In the process the CFS will be re-deployed.

4.13.4.5 *deActivate*

This API allows an OSS/NMS to set the adminState of a service to DOWN. Upon a successful update of the adminState the specified service will be re-deployed on the network.

Pre-condition(s): The CFS supporting the product instance must be in the Provisioned_Active state.
The CFS should be created by the EPNM system and to be in discovered State.
The CFS should be having the adminStatus as UP

Post-condition(s): In case of success, the admin Status of the CFS associated with the product instance will be in UP State. If the request fails, the CFS will be returned to their original state before the service request. The use will receive a ServiceStateTransition Failure in the response.

4.13.4.5.1 Input

Request parameter	Data Type	Description
activateRequest	activateRequst	Information about service activation
basicInput	BasicInputType	
VendorExtensions	AnyListType	Vendor extensions required for this request.
productName	NamingAttributeType	Name of product associated with terminate request.
soaInput	RequestInfoSOAwareType	Service Order Aware Type. Not used in request processing, but mandatory in request data.
productSpecificationName	NamingAttributeType	Not used. Ignored
productBundleName	NamingAttributeType	Not used. Ignored
productSpecCharacteristicRef	NamingAttributeType	Not used. Ignored
productCharacteristicValue	String	Not used. Ignored
subscriberRefList	NamingAttributeType	Not used. Ignored
userRefList	NamingAttributeType	Not used. Ignored
sapRefList	NamingAttributeType	Not used. Ignored

4.13.4.5.2 Activate Response

Upon success, a CFS creation will be sent as part of the response. A CFS State Transition Event will be generated as part of a successful response. Upon a failure, A CFS State Transition Failure Event will be generated as part of an un-successful response.

4.13.4.5.3 Output

Response parameter	Data Type	Description
terminateResponse	terminateResponse	Details of the terminated service(s).
cfsStateChange	CfsStateChangeEventType	Indicates that target OS has progressed one or more CFSs from one state to another state.
serviceStateTransitionFailureEvent	ServiceStateTransitionFailureEventType	Indicates partial failure scenario.

4.13.4.5.4 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

NOTE: The API is generally used to deactivate a Service. In this case the API is specifically used to turn the AdminStatus of the CFS to DOWN. In the process the CFS will be re-deployed.

4.13.4.6 *retrieveServiceStates*

The API allows an OSS/NMS to retrieve the state of the previously-performed provision request. This operation returns the name and state for each CFS associated with a given product instance. (This is typically done instead of CFS events for creation, state change, and deletion.)

Pre-condition(s): The product instance (identified by productName) must already exist.

Post-condition(s): In case of success, the CFS(s) associated with the product instance will be unchanged, and the requesting OS will have the information that it requested. In case of failure, the CFS(s) associated with the product instance are unchanged but the requesting OS will not have the information that it requested.

4.13.4.6.1 Input

Request parameter	Data Type	Description
retrieveServiceStateRequest	retrieveServiceStateRequest	Details of the service states requested.
rootRequest	RootRequestType	
VendorExtensions	AnyListType	Vendor extensions required for this request.
productName	NamingAttributeType	Name of product associated with the terminate request.

4.13.4.6.2 Output

Response parameter	Data Type	Description
retrieveServiceStatesResponse	retrieveServiceStatesResponse	Details of the service states retrieved.
cfsName	NamingAttributeType	Names of the CFS.
cfsState	String	State of the CFS.

4.13.4.6.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.14 Alarm Retrieval

The Alarm Retrieval operations retrieve alarm details.

4.14.1 Operations

4.14.1.1 *getActiveAlarms*

This operation retrieves the active alarms.

4.14.1.1.1 Input

Request parameter	Data Type	Description
getActiveAlarmsRequest	getActiveAlarmsRequest	Details of the alarms requested.
Filter	ActiveAlarmFilterType	
Scope	NamingAttributeListType	Identifies the FDN of the object associated with the Alarm request.
perceivedSeverityList	PerceivedSeverityListType	Holder element that contains the data for perceivedSeverity
perceivedSeverity	PerceivedSeverityType	Enum values for severity
PerceivedSeverityType	ENUM	Allowed values are INDETERMINATE, CRITICAL, MAJOR, MINOR, WARNING, CLEARED
probableCauseList	ProbableCauseListType	List of probable causes
Prc	ProbableCauseType	
Extension	String	If the probableCause is set to VENDOR_EXT, this field contains the value.
Qualifier		Alarm Id
probableCause	ProbableCauseEnumType	Used to capture extended value
ProbableCauseEnumType	ENUM	Supported values are VENDOR_EXT, UNIDENTIFIED. Use UNIDENTIFIED to ignore the extension value.
Extension	String	If the probableCause is set to VENDOR_EXT, this field contains the value.
Qualifier		Alarm Id.
acknowledgeIndication	AcknowledgeIndicationType	This attribute filters the alarms based on its acknowledge indication.
AcknowledgeIndicationType	ENUM	Possible values are EVENT_ACKNOWLEDGED, EVENT_UNACKNOWLEDGED, and NOT_APPLICABLE. The value NOT_APPLICABLE indicates that alarms with any acknowledge indication are in scope.

4.14.1.1.2 Output

Alarm Data	Data Type	Description
getActiveAlarmsResponse		Holder element that contains the list of alarms.
Alarm	AlarmType	Holder element that contains the data given below for the Alarm Object.
notificationId	String	Alarm Id
objectName	NamingAttributeType	Identifies the FDN of the object associated with the Alarm.

osTime	Date	The time at which the alarm was reported.
aliasNameList	AliasNameListType	Alias of network entity
aliasName	String	Always set to ObjectDisplayName
aliasValue	String	The source object display name.
probableCause	ProbableCauseType	Holder element that contains the data for probableCause, extension and qualifier
probableCause	ProbableCauseEnumType	Supported values are VENDOR_EXT, UNIDENTIFIED
Extension	String	If the probableCause is set to VENDOR_EXT, this field contains the value
Qualifier		Alarm Id
nativeProbableCause	String	Identifies the native probable cause
additionalText	String	More information about the alarm
perceivedSeverity	PerceivedSeverityType	Indicates the severity of the alarm
serviceAffecting	ServiceAffectingType	Indicates whether the alarm has affected service
acknowledgeIndication	AcknowledgeIndicationType	The acknowledge indication state
VendorExtensions	**ciscoAlarmExtension**	**Contains Cisco specific Vendor Extensions**
lastUpdatedAt	Date	Reflects the time when the Alarm was last modified.
nttyaddrss7_address	String	Used to associate AP alarms with their controller.
Notes	String	Notes added to the alarm by the operator.
Owner	String	Name or ID of the person assigned to handle this alarm. If value is set to NULL, no owner is assigned.
deviceName	String	Represents the entity for which the event/alarm is reported.

4.14.1.1.3 Exceptions:

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.14.1.2 *getActiveAlarmsCount*

This operation retrieves the count of active alarms.

4.14.1.2.1 Input

Request parameter	Data Type	Description
getActiveAlarmsCountRequest	getActiveAlarmsCountRequest	Details of the alarm count requested.
Filter	ActiveAlarmFilterType	
Scope	NamingAttributeListType	Identifies the FDN of the object associated with the Alarm request.
perceivedSeverityList	PerceivedSeverityListType	Holder element that contains the data for perceivedSeverity.
perceivedSeverity	PerceivedSeverityType	Enum values for severity.

Request parameter	Data Type	Description
PerceivedSeverityType	ENUM	Allowed values are INDETERMINATE, CRITICAL, MAJOR, MINOR, WARNING, and CLEARED.
probableCauseList	ProbableCauseListType	List of probable causes.
Prc	ProbableCauseType	-
Extension	String	If the probableCause is set to VENDOR_EXT, this field contains the value.
Qualifier		Alarm Id
probableCause	ProbableCauseEnumType	Used to capture extended value.
ProbableCauseEnumType	ENUM	Supported values are VENDOR_EXT, UNIDENTIFIED. Use UNIDENTIFIED to ignore the extension value.
Extension	String	If the probableCause is set to VENDOR_EXT, this field contains the value.
Qualifier		Alarm Id.
acknowledgeIndication	AcknowledgeIndicationType	This attribute filters the alarms based on its acknowledge indication.
AcknowledgeIndicationType	ENUM	Possible values are EVENT_ACKNOWLEDGED, EVENT_UNACKNOWLEDGED, and NOT_APPLICABLE. The value NOT_APPLICABLE indicates that alarms with any acknowledge indication are in scope.

4.14.1.2.2 Output

Alarm Data	Data Type	Description
getActiveAlarmsCountResponse	AlarmType	Holder element that contains the data given below for the Alarm Object.
activeAlarmCount	integer	Total number of alarms.

4.14.1.2.3 Exceptions:

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.14.1.3 *getActiveAlarmsIterator*

4.14.1.3.1 Input

Request Parameter	Data Type	Description
iteratorReferenceURI	String	Iterator reference URI which must be present to retrieve next batch of Objects. **Note**: this information is set on the request message on the MTOSI header part.

4.14.1.3.2 Output

Response Data	Data Type	Description
batchSequenceEndOfReply	boolean	Indicator of end of batched replies.
iteratorReferenceURI	String	Iterator reference URI which can be used to retrieve the next batch.
getActiveAlarmsResponse	AlarmListType	Container for list of alarms.

4.14.1.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.15 TerminationPointControl

The interface provides operations to control a Termination point.

4.15.1 Operations

4.15.1.1 *setTerminationPointData*

This operation allows a user to set supported layered parameters on a termination point.

4.15.1.1.1 Input

Request parameter	Data Type	Description
setTerminationPointDataRequest	setTerminationPointDataRequest	Details of the Termination Point.
tpData	TerminationPointData	
tpRef	NamingAttributeListType	Identifies the FDN of the termination point.
transmissionParametersList	TransmissionParametersListType	List of Transmission Parameters supported by the Termination Point
layerRate	LayerRateType	Enum values for LayerRate
parameterList	ParameterListType	List of Name Value pairs to indicate the Parameter and the value to be assigned.

4.15.1.1.2 Supported Parameter Name and Value Table

This section lists the paramters that has to be provided for the API. The parameter names has to match with the value provided in the “Parameter Name” column. Those parameters of type Enum, the Enum values should match with supported Enum types provided.

Parameter Name	Data Type	Description
AdminStatus		Parameters for Admin Status
adminState	ENUM	UP, DOWN, TESTING
LoopBack		Parameters for Loop Back
loopBack	ENUM	NO_LOOPBACK, OTHER, INTERNAL, LINE, DROP

ALS (Automatic Laser Shutdown)		Parameters for Automatic Lazer Shutdown
alsMode	ENUM,	DISABLED, AUTO, MANUAL_RESTART,MANUAL_RESTART_FOR_TEST
alsRecoveryPulseWidth	Float	Value Ranging from 2.0 to 100.0
alsRecoveryInterval	Float	Value Ranging from 60 to 100
OTN PEP Settings		Parameters for OTN Protocol Endpoint
fec	ENUM	ENHANCED, ENHANCED_HG20, ENHANCED_HG7, ENHANCED_I_4, ENHANCED_I_7, ENHANCED_SWIZZLE, STANDARD, NODE, SD_20 **NOTE**: This attribute is mandatory for OTN settings
payloadmap	ENUM	ASYNC, NOOPU2FIXEDSTUFF, NOTAPPLICABLE, ODU, SYNC **NOTE**: This attribute is mandatory for OTN settings
admssm	ENUM	DUS, PRS, RES, SMC, ST2, ST3, ST3E, ST4, STU, TNC, G811, G812T, G812L, SETS **NOTE**: This attribute is mandatory for OTN settings
syncmsg	Boolean	true, false **NOTE**: This attribute is mandatory for OTN settings
g709	Boolean	true, false
sdber	ENUM	E_3, E4, E_5, D_6, E_7, E_8. E_9
gcc0	Boolean	true, false
ttiSapiSent	String	Free format String
ttiDapiSent	String	Free format String
ttiOperatorSent	String	Free format String
ttiSapiExpected	String	Free format String
ttiDapiExpected	String	Free format String
ttiOperatorExpected	String	Free format String
trcLevel	String	J0, TTI-SM, TTI-PM
trcMode	String	AUTO, AUTO-NO-AIS, MAN, MAN-NO-AIS,OFF
EthernetFlowControl Params(s)		Parameters for Ethernet Flow Control
flowControl	ENUM	BIDIRECTIONAL, EGRESS, INGRESS
SONET / SDH Param(s)		Parameters for SONET / SDH
sonetXmtClockSource	ENUM	LOOP_TIMING, LOCAL_TIMING, LINE_TIMING, INTERNAL_TIMING
WaveLength Param(s)		Parameters for Wavelength Setting
wavelength	Float	
Optics Payload Param(s)		Parameters required for Opitcal Payload
portMode	ENUM	ETHERNET, FC, OTN,SDH, SONET, **BREAKOUT** (needs to be specified if BREAKOUT has to be applied to the parent controller).
framing	ENUM	OPYU0, OPU1, OPU1E, OPU2, OPU3, OPU3E1,OPU3E2, OPU4, OPU4FLEX, OPUFlex, OPU1F, OPU2F, **NONE** (for creating BREAKOUT).
mapping	ENUM	BMP, GMP, GFPF, GFPT, WIS. HDLC. HDLC_LEX, HDLC_X86, CBR, TRP, **NONE** (for creating BREAKOUT).
rate	ENUM	OC3, OC12, OC48, OC192, STM1, STM4, STM16, STM64, **NONE** (for creating BREAKOUT).
bitRate	Long	**0** (for creating BREAKOUT)
ODU Param(s)		Parameters for ODU

gcc	String	true (DEFAULT), false (remove the controller). **NOTE**: This attribute is mandatory for setting ODU parameters
tsG	String	-
ttiSent	String	-
ttiSapiSent	String	-
ttiDapiSent	String	-
ttiOperatorSent	String	-
ttiSapiExpected	String	-
ttiDapiExpected	String	-
ttiOperatorExpected	String	-
ttiExpected	String	-
ODU Channelization		Parameters required to create ODU Channels
channelize_ODU	Boolean	Optional attribute should be set to 'True' for creating the channel and 'false' for removing ODU Channel.
ODU_channel	String	Channel values eg: /ODU/0/1/2
oduLayer	ENUM	Possible values: ODU0, ODU1, ODU2, ODU-FLEX, ODU1E, ODU2E, ODU2F, ODU3, ODU3E1, ODU3E2.
tpn	NUMBER	Tributary Port Number, Possible Values: 1-80
tps	String	Tributary Slots, Tributary slot string separated by (:) or (-) from 1 to no of Time Slots in Parent ODU controller. Eg: 3:4
TTi		
trcLevel	String	Permitted values: • J0 • TTI-SM • TTI-PM **NOTE**: This attribute is mandatory for setting tti
trcMode	String	Permitted values: • AUTO • AUTO-NO-AIS • MAN • MAN-NO-AIS • OFF **NOTE**: This attribute is mandatory for setting tti
ttiExpected	String	Free format **NOTE**: This attribute is mandatory for setting tti
ttiSent	String	Free format **NOTE**: This attribute is mandatory for setting tti
Optics Breakout Mode		Parameters required for Breakout Mode
laneNumber	Integer	1 to 10 (indicating the lane number to be configured or removed) **NOTE**: This attribute is mandatory for identifying specific lanes
portMode	String	One of the following values: ETHERNET, FC, OTN,SDH, SONET, and NONE (for removing breakout Lane). **NOTE**: This attribute is mandatory along with laneNumber for identifying the lanes and its portMode

framing	String	One of the following values: OPYU0, OPU1, OPU1E, OPU2, OPU3, OPU3E1,OPU3E2, OPU4, OPU4FLEX, OPUFlex, OPU1F, OPU2F, and NONE (for removing breakout Lane).
mapping	String	One of the following values: BMP, GMP, GFPF, GFPT, WIS. HDLC. HDLC_LEX, HDLC_X86, CBR, TRP, and NONE (for removing breakout Lane).
rate	String	One of the following values: OC3, OC12, OC48, OC192, STM1, STM4, STM16, STM64, and NONE (for removing breakout Lane).
bitrate	Long	0 (For removing breakout Lane)
OpticalMplsTeNniSettings		
ttiMode	String	TTI Mode – one of the following values SM, PM, TCM_1, TCM_2, TCM_3, TCM_4, TCM_5, TCM_6
adminWeight	String	<0-65535> Admin weight value

NOTE:

1. For creating a Breakout, the parent controller's portMode attribute should be set to BREAKOUT with framing, mapping, rate set to NONE and bitrate set to 0.
2. The individual lanes can be configured by specifying the values other than NONE for portMode, framing, mapping, and rate.
3. A Break out Lane can be removed by specifying NONE for portMode, framing, mapping, rate, and bitrate as 0 with the lane number indicating the Lane to be un-configured/removed.
4. For resetting the breakout configuration:
    a. A user has to set the parent controller's portMode, framing, mapping, and rate to NONE and bitrate to 0. This will remove the breakout configuration on the parent controller and all the associated lanes.
    b. The regular portMode configuration can be applied using the required values for portMode, mapping, framing, rate, and bitrate.

4.15.1.1.3 Output

Termination Point Data	Data Type	Description
setTerminationPoint DataResponse		Holder element that contains the Termination Point Data.
modifiedTp	TerminationPointDataType	The complex element containing the Termination Point which was modified.
Name	NamingAttribute	FDN of the TP (RDN sequence containing MD, ME, and TP.)
discoveredName	String	name of the TP
VendorExtensions	ciscoAlarmExtension	Contains Cisco specific Vendor Extensions
ciscoPtpExtension	CiscoPtpExtension	Vendor Extension data containing the attributes supported by the Termination Point (described in the Supported Parameter Name and Value Table).

4.15.1.1.4 Exceptions:

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.16 ConnectionControl

The interface provides operations to control a Service Connections.

4.16.1 Operations

4.16.1.1 *switchRoute*

This operation allows a user to set perform a manual Revert of a Service. This API is provided as an extension. The input should be a valid CFS ID.

NOTE: This operation is supported for OCHTRAIL and OCHNC service types only.

Pre-Condition: The restoration Status of the service should be in RESTORED & REVERTIBLE for the manual Revert Operation to succeed.

Request parameter	Data Type	Description
switchRouteRequest	SwitchRouteRequestType	Details of SwitchRoute Request
sncRef	NamingAttributeListType	FDN for the Service (MD=CISCO_EPNM / CFS=<CFSID> of <CFSNAME>) NOTE: This API takes the service ID as input hence the CFS RDN should be provided.

4.16.1.1.1 Output

Switch Route Data	Data Type	Description
SwitchRouteResponse		Holder Element that contains information about the ManualRevert operation.
modifiedTp	TerminationPointDataType	The complex element containing the Termination Point which was modified.
VendorExtensions	ciscoAlarmExtension	Contains Cisco specific Vendor Extensions
ciscoConnectionControlManualRevert	CiscoConnectionControlManualRevertType	
controlCommand	String	The Command issued.
controlCommandMessage	String	The message returned from the command execution.
controlCommandResult	String	True/False to indicate the success/failure status of the command.
controlDevice	String	The device on which the action was performed.

Post-Condition: On a successful completion of the switchRoute (manual Revert) the service will go back to its original Path. The restoration Status will change to NONE.

4.16.1.1.2 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

notImplemented: Indicates that the operation is not implemented by the management system.

Note: The SwitchRoute operation is provided to perform a Manual Revert operation on a given service. This is a deviation from the standard support provided by the switchRoute API.

4.16.1.2 *setIntendedRoute*

This operation allows a user to set Perform an Upgrade and Restore of a Service. This API is provided as an extension. The input should be a valid CFS ID.

Note: This operation is supported for OCHTRAIL and OCHNC service types only.

Pre-Condition: The restoration Status of the service should be RESTORED or RESTORED & REVERTIBLE.

Request parameter	Data Type	Description
setIntendedRouteRequest	SetIntendedRouteRequestType	Details of SwitchRoute Request
sncRef	NamingAttributeListType	FDN for the Service (MD=CISCO_EPNM / CFS=<CFSID> of <CFSNAME>) NOTE: This API takes the service ID as input hence the CFS RDN should be provided.

4.16.1.2.1 Output

Switch Route Data	Data Type	Description
SetIntendedRouteResponse		Holder Element that contains information about the Upgrade Restore operation.
VendorExtensions	ciscoAlarmExtension	Contains Cisco specific Vendor Extensions
ciscoConnectionControlUpgradeRestore	CiscoConnectionControlUpgradeRestoreType	
controlCommand	String	The Command issued
controlCommandMessage	String	The message returned from the command execution.
controlCommandResult	String	True /False to indicate the success/failure status of the command.
controlDevice	String	The device on which the action was performed.

Post-Condition: On a successful setIntentedRoute (upgradeRestore) the current restoration path will be set as the working path. Restoration Status will be set to NONE.

4.16.1.2.2 Exceptions:

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

Note: The setIntendedRoute operation is provided to perform an Upgrade And Restore operation on a given service (OCHTRAIL or OCHNC nnly). This is a deviation from the standard support provided by the setIntendedRoute API.

4.17 ProtectionProfileControl

The interface provides operations to control a Protection Profiles.

4.17.1 ProtectionProfileDataType

The following table lists the Protection Profile data that can be created, modified and retrieved by the interface.

ProtectionProfileData	Data Type	Description
profileName	String	Protection Profile Name
protectionType	String	APS Protection Type, possible values: • 1-plus-1-BDIR-APS • 1-plus-1-UNIDIR-APS • 1-plus-1-UNIDIR-NO-APS • 1-plus-1-plus-R-BIDIR-APS
protectionMode	String	APS Protection Mode. Possible values: • Revertive • Non-Revertive
holdOffTimer	Long	Hold-off timer in seconds. Range 100-10000
waitToRestoreTimer	Long	Wait to restore timer in seconds. Range 0-720
sncConnectionMode	String	Sub-Network Connection Mode, possible values: • SNC-I • SNC-N • SNC-S

4.17.2 Operations

4.17.2.1 *CreateProtectionProfile*

This operation allows a user to create protection profile on Device. This API is provided as an extension. The input should be a valid MeRef.

4.17.2.1.1 Input

Request parameter	Data Type	Description
createProtectionProfileRequest	createProtectionProfileRequestType	Details of Protection Profile Request
meRef	NamingAttributeListType	FDN for the Device (MD=CISCO_EPNM / ME= ME ID)
protectionProfileData	ProtectionProfileDataType	Details of Protection Profile

4.17.2.1.2 Output

Request parameter	Data Type	Description
createAndModifyProtectionProfileResponse	createAndModifyProtectionProfileResponseType	Details of Protection Profile Creation and Modify Response
protectionProfileRef	NamingAttributeListType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME ID /PPF=<profileName>)
protectionProfileData	ProtectionProfileDataType	Details of created Protection Profile

Post-Condition: On a successful creation of the Protection Profile.

4.17.2.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.17.2.2 *ModifyProtectionProfile*

This operation allows a user to modify protection profile on Device. This API is provided as an extension. The input should be a valid protectionProfileRef.

4.17.2.2.1 Input

Request parameter	Data Type	Description
modifyProtectionProfileRequest	ModifyProtectionProfileRequestType	Details of Protection Profile Request
protectionProfileRef	NamingAttributeListType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME ID /PPF=<profileName>)
protectionProfileData	ProtectionProfileDataType	Details of Protection Profile, only attributes being modified are provided

4.17.2.2.2 Output

Request parameter	Data Type	Description
createAndModifyProtectionProfileResponse	createAndModifyProtectionProfileResponseType	Details of Protection Profile Creation and Modify Response
protectionProfileRef	NamingAttributeListType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME ID /PPF=<profileName>)
protectionProfileData	ProtectionProfileDataType	Details of Modified Protection Profile

Post-Condition: On a successful modification of the Protection Profile.

4.17.2.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.17.2.3 *DeleteProtectionProfile*

This operation allows a user to modify protection profile on Device. This API is provided as an extension. The input should be a valid protectionProfileRef.

4.17.2.3.1 Input

Request parameter	Data Type	Description
deleteProtectionProfileRequest	DeleteProtectionProfileRequestType	Details of Protection Profile Request

Request parameter	Data Type	Description
protectionProfileRef	NamingAttributeListType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME ID /PPF=<profileName>)

4.17.2.3.2 Output

Request parameter	Data Type	Description
deleteProtectionProfileResponse	DeleteProtectionProfileResponseType	Details of Protection Profile Delete Response

Post-Condition: On a successful deletion of the Protection Profile.

4.17.2.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.18 ProtectionProfileRetrieval

This section describes the operations supported by the ProtectionProfileRetrieval interface.

4.18.1.1 *getAllProtectionProfiles*

This operation retrieves complete information about all Protection Profiles present in Cisco EPN Manager.

4.18.1.1.1 Input

Request parameter	Data Type	Description
mdOrMeRef	NamingAttributeType	FDN of Managed domain name or FDN of Managed Element Name=MD, value=CISCO_EPNM. OR MD=CISCO_EPNM / ME= ME Name

4.18.1.1.2 Output

Response parameter	Data Type	Description
getAllProtectionProfilesResponse	getAllProtectionProfilesResponse	Protection Profile Details
protectionProfileRef	NamingAttributeListType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME ID /PPF=<profileName>)
profileName	String	Protection Profile Name
protectionType	String	APS Protection Type, possible values: • 1-plus-1-BDIR-APS • 1-plus-1-UNIDIR-APS • 1-plus-1-UNIDIR-NO-APS • 1-plus-1-plus-R-BIDIR-APS
protectionMode	String	APS Protection Mode. Possible values: • Revertive • Non-Revertive
holdOffTimer	Long	Hold-off timer in seconds. Range 100-10000

Response parameter	Data Type	Description
waitToRestoreTimer	Long	Wait to restore timer in seconds. Range 0-720
sncConnectionMode	String	Sub-Network Connection Mode, possible values: • SNC-I • SNC-N • SNC-S

4.18.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.18.1.2 *getProtectionProfile*

This operation retrieves complete information of requested Protection Profiles present in Cisco EPN Manager.

4.18.1.2.1 Input

Request parameter	Data Type	Description
protectionProfileRef	NamingAttributeType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME Name /PPF=<profileName>)

4.18.1.2.2 Output

Response parameter	Data Type	Description
getProtectionProfilesResponse	getProtectionProfilesResponse	Protection Profile Details
protectionProfileRef	NamingAttributeListType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME ID /PPF=<profileName>)
profileName	String	Protection Profile Name
protectionType	String	APS Protection Type, possible values: • 1-plus-1-BDIR-APS • 1-plus-1-UNIDIR-APS • 1-plus-1-UNIDIR-NO-APS 1-plus-1-plus-R-BIDIR-APS
protectionMode	String	APS Protection Mode. Possible values: • Revertive • Non-Revertive
holdOffTimer	Long	Hold-off timer in seconds. Range 100-10000
waitToRestoreTimer	Long	Wait to restore timer in seconds. Range 0-720
sncConnectionMode	String	Sub-Network Connection Mode, possible values: • SNC-I • SNC-N • SNC-S

4.18.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.18.1.3 *getAllSubnetworkConnectionsWithProtectionProfile*

This operation retrieves all Sub-network Connections associated with requested Protection Profiles present in Cisco EPN Manager.

4.18.1.3.1 Input

Request parameter	Data Type	Description
protectionProfileRef	NamingAttributeType	FDN for the Protection Profile (MD=CISCO_EPNM / ME= ME Name /PPF=<profileName>)

4.18.1.3.2 Output

Response parameter	Data Type	Description
getAllSubnetworkConnectionsWithProtectionProfileResponse	MultipleSubnetworkConnectionObjectsResponseType	Details of the Subnetwork Connection for the given Protection Profile. Note: Please refer to the output of "getAllSubnetworkConnections" to get details of the attributes.

4.18.1.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.19 MPLSTEExplicitPathControl

The interface provides operations to control Explicit Path

4.19.1 MPLSTEExplicitPathDataType

The following table lists the Explicit Path data that can be created, modified and retrieved by the interface.

MPLSTEExplicitPathDataType	Data Type	Description
pathRef	NamingAttributeType	Sequence of RDNs (MD=CISC_EPNM / ME=ME NAME/ TEPATH=PathName)
pathEntries	ExplicitPathEntryType	Ordered List of Path Constraints

ExplicitPathEntryType	Data Type	Description
id	Long	Path Constraints Index - 1-65535 (Progressive Index)
constraintType	String	Path Constraint Type, Possible Values • Strict • Loose • None
meRef	NamingAttributeListType	FDN of Device (MD=CISCO_EPNM / ME= ME ID) making up explicit path

ExplicitPathEntryType	Data Type	Description
tpRef	NamingAttributeListType	FDN of PTP/CTP (ODU Controller) making up explicit path. (MD=CISCO_EPNM / ME= ME ID /CTP=<ODU Controller Name>) This fields is applicable only for Path Constraint type 'Strict'

4.19.2 Operations

4.19.2.1 *CreateMPLSTEExplicitPath*

This operation allows a user to create Explicit Path on Device. This API is provided as an extension. The input should be a valid MeRef.

4.19.2.1.1 Input

Request parameter	Data Type	Description
createMPLSTEExplicitPathRequest	createMPLSTEExplicitPathType	Details of Explicit Path Request
explicitPathData	MPLSTEExplicitPathDataType	Details of Explicit Path, Ordered lists of Explicit Path Entries needs to be provided

4.19.2.1.2 Output

Request parameter	Data Type	Description
createMPLSTEExplicitPathResponse	createMPLSTEExplicitPathResponseType	Details of Explicit Path Creation and Modify Response
explicitPathRef	NamingAttributeListType	FDN for the Explicit Path (MD=CISCO_EPNM / ME= ME ID /TEPATH=<pathName>)
explicitPathData	MPLSTEExplicitPathDataType	Details of created Expicit Path

Post-Condition: On a successful creation of the Explicit Path.

4.19.2.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.19.2.2 *ModifyMPLSTEExplicitPath*

This operation allows a user to modify explicit path on Device. This API is provided as an extension. The input should be a valid Explicit Path Ref. Modify API will not take partial explicit path entries, OSS needs to pass all explicit path entries and API will overwrite existing explicit path with provided explicit path entries.

4.19.2.2.1 Input

Request parameter	Data Type	Description
modifyMPLSTEExplicitPathRequest	ModifyMPLSTEExplicitPathRequestType	Details of Explicit Path Creation and Modify Response
explicitPathData	ProtectionProfileDataType	Details of Explicit Path, only attributes being modified are provided

4.19.2.2.2 Output

Request parameter	Data Type	Description
createAndModifyMPLSTEExplicitPathResponse	createAndModifyMPLSTEExplicitPathResponseType	Details of Explicit Path Creation and Modify Response
explicitPathRef	NamingAttributeListType	FDN for the Explicit Path (MD=CISCO_EPNM / ME= ME ID /TEPATH=<pathName>)
explicitPathData	ProtectionProfileDataType	Details of Modified Explicit Path

Post-Condition: On a successful modification of the explicit path.

4.19.2.2.3 Exceptions:

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.19.2.3 *DeleteMPLSTEExplicitPath*

This operation allows a user to modify explicit path from the device. This API is provided as an extension. The input should be a valid Explicit Path Ref.

4.19.2.3.1 Input

Request parameter	Data Type	Description
deleteMPLSTEExplicitPathRequest	DeleteMPLSTEExplicitPathRequestType	Details of Protection Profile Request
explicitPathRef	NamingAttributeListType	FDN for the Explicit Path (MD=CISCO_EPNM / ME= ME ID /TEPATH=<pathName>)

4.19.2.3.2 Output

Request parameter	Data Type	Description
deleteMPLSTEExplicitPathResponse	DeleteMPLSTEExplicitPathResponseType	Details of Explicit path Delete Response

Post-Condition: On a successful deletion of the Explicit Response.

4.19.2.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.
notImplemented: Indicates that the operation is not implemented by the management system.

4.20 MPLSTEExplicitPathRetrieval

This section describes the operations supported by the MPLS TE Explicit Path interface.

4.20.1.1 *getAllMPLSTEExplicitPaths*

This operation retrieves complete information about all Explicit Paths present in Cisco EPN Manager.

4.20.1.1.1 Input

Request parameter	Data Type	Description
mdOrMeRef	NamingAttributeType	FDN of Managed domain name or FDN of Managed Element Name=MD, value=CISCO_EPNM. OR MD=CISCO_EPNM / ME= ME Name

4.20.1.1.2 Output

Response parameter	Data Type	Description
getAllMPLSTEExplicitPathsResponse	getAllMPLSTEExplicitPathsResponseType	Explicit Path Details conatins following attributes
explicitPathRef	NamingAttributeListType	FDN for the Explicit Path (MD=CISCO_EPNM / ME= ME ID /TEPATH=<pathName>)
explicitPaths	MPLSTEExplicitPathDataType	List of Explicit Paths

4.20.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.20.1.2 *getMPLSTEExplicitpath*

This operation retrieves complete information of requested Explicit Path present in Cisco EPN Manager.

4.20.1.2.1 Input

Request parameter	Data Type	Description
explicitPathRef	NamingAttributeType	FDN for the Explicit Path (MD=CISCO_EPNM / ME= ME ID /TEPATH=<pathName>)

4.20.1.2.2 Output

Response parameter	Data Type	Description
getMPLSTEExplicitPathResponse	getMPLSTEExplicitPathResponseType	Explicit Path Details conatins following attributes
explicitPathRef	NamingAttributeListType	FDN for the Explicit Path (MD=CISCO_EPNM / ME= ME ID /TEPATH=<pathName>)
explicitPaths	MPLSTEExplicitPathDataType	List of Explicit Paths

4.20.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.20.1.3 *getAllSubnetworkConnectionsWithExplicitPath*

This operation retrieves all Sub-network Connections associated with requested Explicit Pacth present in Cisco EPN Manager.

4.20.1.3.1 Input

Request parameter	Data Type	Description
explicitPathRef	NamingAttributeType	FDN for the Explicit Path (MD=CISCO_EPNM / ME= ME ID /TEPATH=<pathName>)

4.20.1.3.2 Output

Response parameter	Data Type	Description
getAllSubnetworkConnectionsWithExplicitPathResponse	MultipleSubnetworkConnectionObjectsResponseType	Details of the Subnetwork Connection for the given Explicit Path. Note: Please refer to the output of "getAllSubnetworkConnections" to get details of the attributes.

4.20.1.3.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.21 Notifications

MTOSI Notifications are supported for the following notification categories:

- Object Creation (OC)
- Object Deletion (OD)
- Attribute Value Change (AVC)

State change notifications will be supported as AVC notifications.

4.21.1 Notification Support Matrix

The following table provides the notification support matrix.

Sl. No	Inventory Item	Sub Inventory Item
1	Physical inventory	Managed Element
2		Equipment
3		Equipment Holder
4		Physical Termination Point
5	Connection	Subnetwork Connection
6		Optical Route
7		Cross Connect
8		Flow Domain Fragment
9		Flow Domain Fragment Route
10	Topology	Topological Link
11	Service inventory/activation	Customer Facing Service Inventory – DWDM/OTN/EVC

4.21.1.1 *Service Provisioning Notifications Matrix*

	Provision	Deploy	Amend	Cease
Succeeded	CfsCreationEventType	CfsStateChangeEventType	CfsAvcEventType	CfsDeletionEventType
Failed	CiscoServiceCreationFailureEventType	ServiceStateTransitionFailureEventType	ServiceAvcFailureEventType	ServiceDeletionFailureEventType

Cancelled	CiscoServiceStateTransitionFailureEventType	ServiceStateTransitionFailureEventType	ServiceStateTransitionFailureEventType	ServiceStateTransitionFailureEventType

- Indicates Cisco proprietary events.

4.21.2 Notification Subscribe Interface

This interface allows the OSS to subscribe for notifications. The available topics are INVENTORY_NOTIFICATION, ALARM_NOTIFICATION and SERVICE_NOTIFICATION.

4.21.2.1.1 Input

Request parameter	Data Type	Description
consumerEpr	String	URL where the notification consumer service is running.
Topic	String	INVENTORY_NOTIFICATION or ALARM_NOTIFICATION or SERVICE_NOTIFICATION.

4.22 Alarm Handling

The Alarm Handling operations perform ack/unack operations on alarms.

4.22.1 Operations

4.22.1.1 *acknolwledgeAlarms*

This operation acknowledges alarms.

4.22.1.1.1 Input

Request parameter	Data Type	Description
acknowledgeAlarmsRequest	AcknowledgeAlarmsRequest	Details of the alarms to be acknowledged.
probableCause	ProbableCauseType	Probable cause
qualifier	String	Alarm Id
username	String	Name of user
notepad	String	Note
objectName	NamingAttributeType	Identifies the FDN of the object associated with the Alarm.

4.22.1.1.2 Output

Alarm Data	Data Type	Description
acknowledgeAlarmsResponse	AcknowledgeAlarmsResponse	Acknowledge Alarms Response, containing list of alarm ids, for which ack operation failed (if any).
failedAcknowledgeIdList	AlarmOrTcaIdListType	List of alarm ids, for which ack operation failed.

4.22.1.1.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

4.22.1.2 *unacknolwledgeAlarms*

This operation unacknowledges alarms.

4.22.1.2.1 Input

Request parameter	Data Type	Description
unacknowledgeAlarmsRequest	UnacknowledgeAlarmsRequest	Details of the alarms to be unacknowledged.
probableCause	ProbableCauseType	Probable cause
qualifier	String	Alarm Id
username	String	Name of user
notepad	String	Note
objectName	NamingAttributeType	Identifies the FDN of the object associated with the Alarm.

4.22.1.2.2 Output

Alarm Data	Data Type	Description
unacknowledgeAlarms Response	UnacknowledgeAlarms Response	Unacknowledge Alarms Response, containing list of alarm ids, for which unack operation failed (if any).
failedUnacknowledgeIdList	AlarmOrTcaIdListType	List of alarm ids, for which unack operation failed.

4.22.1.2.3 Exceptions

internalError: Indicates that an internal error or exception has occurred as part of this call.
invalidInput: Indicates that the input given to the operation is invalid.

5 Cisco-Specific Interfaces

The following table lists the Cisco-specific extensions that are provided in addition to the standard APIs.

Interface Name	API Name	Cisco Extenson
FlowDomainFragmentNameRetrieval	getAllFlowDomainFragmentNames	Y
	getAllFlowDomainFragmentNamesIterator	Y
ManagedElementNamesRetrieval	getAllManagedElementNames	Y
	getManagedElementNamesIterator	Y
CustomerNamesRetrieval	getAllCustomerNames	Y
	getCustomerNamesIterator	Y
QosProfileNamesRetrieval	getAllQosProfileNames	Y
	getQosProfileNamesIterator	Y

6 Troubleshooting

The following table provides some issues you might encounter when setting up the OSS integration layer, along with steps to troubleshoot each issue.

Problem Description	Indication	Probable Cause	Troubleshooting Procedure
Web Services Security Exception	Web Service call to any of the Interfaces throws a WS Security exception with authentication failure message.	The user ID/password provided for the web service call might not be correct.	Use a proper User ID/password for the web services call.
getManagedElement returns a SOAP Exception	A call to getManagedElement returns a Web Services exception stating that the device is not in up-state though it is actually up.	The device name specified in request is incorrect.	Cross-check the device name in getManagedElements response and check if device is in up state.

7 Appendix I – WSDL Document References

7.1 MTOSI WSDL Documents

WSDL Documents are part of the MTOSI Specification. They can be accessed at the TM Forum: MTOSI at TM Forum.

8 Appendix II – Example Java Client to Retrieve Inventory

This section provides a Java code snippet that can be used by Java-based OSS clients to invoke a MTOSI web service for retrieving the Managed Element's inventory.

```
package com.cisco.nms.nbi.mtosi.client.example;

import java.net.URL;
import javax.xml.ws.Holder;
import org.tmforum.mtop.fmw.xsd.hdr.v1.Header;
import org.tmforum.mtop.mri.wsdl.mer.v1_0.ManagedElementRetrievalHttp;
import org.tmforum.mtop.mri.wsdl.mer.v1_0.ManagedElementRetrievalRPC;
import org.tmforum.mtop.mri.xsd.mer.v1.GetAllManagedElementsRequest;
import org.tmforum.mtop.mri.xssd.mer.v1.MultipleMeObjectsResponseType;
import org.tmforum.mtop.nrf.xsd.me.v1.ManagedElementType;

/**
 * This example illustrates how to use java api to access mtosi web service
methods. This example
 *  creates  Managed  Element  Retrieval  service  client,  invokes  the
getAllManagedElement operation to
 * get list of managed elements and print the me names from the response.
 */
public class MtosiClientExample {
    public static void main(String[] args) {
        try {
            // Replace localhost with host name or ip address if the target
host is remote host
            String targetHost = "localhost";
            // 1. Create WSDL url - endpoint url with "wsdl" query parameter
to provide the wsdl
            // defintion
            URL wsdlUrl = new URL("http://" + targetHost
                    + "/mtosi/nbi/v1/mri/managedElementRetrievalRPC?wsdl");
            // 2. Create Web Service Client
            ManagedElementRetrievalHttp        merClient        =        new
ManagedElementRetrievalHttp(wsdlUrl);
            // 3. Get Service Interface (PortType)
            ManagedElementRetrievalRPC              merService              =
merClient.getManagedElementRetrievalSoapHttp();
            // 4. Create Request
            Holder<Header> reqHeader = new Holder<Header>(new Header());
            GetAllManagedElementsRequest        reqBody        =        new
GetAllManagedElementsRequest();
            // 5. Invoke Operation
            MultipleMeObjectsResponseType             respType             =
merService.getAllManagedElements(reqHeader,
                    reqBody);
            // 6. Process Response
            for (ManagedElementType me : respType.getMeList().getMe()) {
                System.out.printf("ME     Discovered     Name     =     %s",
me.getDiscoveredName());
            }
        } catch (Exception ex) {
            ex.printStackTrace();
        }
```

```
        }
}
```

9 Appendix III – Sample SOAP Request Response

This appendix provides sample SOAP Requests and Responses for some of the operations provided by the MTOSI NBI layer.

9.1 getAllManagedElements

9.1.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
            <v1:requestedBatchSize>4</v1:requestedBatchSize>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllManagedElementsRequest>

      </v11:getAllManagedElementsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.1.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <soap:Header>
        <header xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
            xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
            xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
            xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
            xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
            xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
            xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
            xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
            xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
            xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
            xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
            xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
            xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
            <requestedBatchSize>4</requestedBatchSize>
            <batchSequenceNumber>1</batchSequenceNumber>
            <batchSequenceEndOfReply>false</batchSequenceEndOfReply>

<iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=39b76a72-dadc-401e-
be3c-cc8aaa747b89
            </iteratorReferenceURI>
        </header>
    </soap:Header>
    <soap:Body>
        <ns4:getAllManagedElementsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
            xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
            xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
            xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
            xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
            xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
            xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
            xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
            xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
            xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
            xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
            xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
            xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
            xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
            <ns4:meList>
                <ns8:me>
                    <ns5:name>
                        <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>prime-asr9010-
3.cisco.com</ns3:value>
                        </ns3:rdn>
                    </ns5:name>
                    <ns5:discoveredName>prime-asr9010-
3.cisco.com</ns5:discoveredName>
                    <ns5:owner>Test123</ns5:owner>
                    <ns5:vendorExtensions>
```

```
                        <ns20:ciscoManagedElementExtension>

<ns20:networkElementId>763765</ns20:networkElementId>
                            <ns20:description>Cisco IOS XR Software (Cisco
ASR9K Series), Version 5.2.2[Default]
                                Copyright (c) 2014 by Cisco Systems, Inc.
                            </ns20:description>

<ns20:managementAddress>172.23.222.254</ns20:managementAddress>
                            <ns20:lastBootTime>2015-05-02T15:33:28.693-
07:00</ns20:lastBootTime>
                            <ns20:creationTime>2015-07-24T20:47:33.213-
07:00</ns20:creationTime>
                            <ns20:collectionTime>2015-08-04T22:07:13.245-
07:00</ns20:collectionTime>

<ns20:collectionStatus>SUCCESS</ns20:collectionStatus>

<ns20:sysObjectId>1.3.6.1.4.1.9.1.1017</ns20:sysObjectId>
                            <ns20:sysUpTime>94 days,
6:26:31.97</ns20:sysUpTime>
                            <ns20:productSeries>Cisco ASR 9000 Series
Aggregation Services Routers</ns20:productSeries>

<ns20:productFamily>Routers</ns20:productFamily>
                            <ns20:softwareType>IOS XR</ns20:softwareType>
                            <ns20:satelliteCount>2</ns20:satelliteCount>
                        </ns20:ciscoManagedElementExtension>
                    </ns5:vendorExtensions>
                    <ns6:resourceState
extension="MANAGED_AND_SYNCHRONIZED">VENDOR_EXT</ns6:resourceState>
                    <ns8:location>chennai1</ns8:location>
                    <ns8:productName>Cisco ASR 9010
Router</ns8:productName>

<ns8:softwareVersion>5.2.2[Default]</ns8:softwareVersion>
                    <ns8:isInSyncState>true</ns8:isInSyncState>

<ns8:communicationState>CS_AVAILABLE</ns8:communicationState>
                </ns8:me>
                <ns8:me>
                    <ns5:name>
                        <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>prime-asr903-1</ns3:value>
                        </ns3:rdn>
                    </ns5:name>
                    <ns5:discoveredName>prime-asr903-
1</ns5:discoveredName>
                    <ns5:owner>CISCO</ns5:owner>
                    <ns5:vendorExtensions>
                        <ns20:ciscoManagedElementExtension>
```

```
<ns20:networkElementId>763763</ns20:networkElementId>
                            <ns20:description>Cisco IOS Software, ASR903
Software (PPC_LINUX_IOSD-UNIVERSALK9_NPE-M),
                                Version 15.5(1)S, RELEASE SOFTWARE (fc5)
                                Technical Support:
http://www.cisco.com/techsupport
                                Copyright (c) 1986-2014 by Cisco Systems,
Inc.
                                Compiled Thu 20-Nov-14 21:02 by mcpre
                            </ns20:description>

<ns20:managementAddress>172.23.222.217</ns20:managementAddress>
                            <ns20:lastBootTime>2015-05-02T15:34:23.075-
07:00</ns20:lastBootTime>
                            <ns20:creationTime>2015-07-24T20:47:33.220-
07:00</ns20:creationTime>
                            <ns20:collectionTime>2015-08-04T22:00:45.337-
07:00</ns20:collectionTime>

<ns20:collectionStatus>SUCCESS</ns20:collectionStatus>

<ns20:sysObjectId>1.3.6.1.4.1.9.1.1441</ns20:sysObjectId>
                            <ns20:sysUpTime>94 days,
6:25:37.40</ns20:sysUpTime>
                            <ns20:productSeries>Cisco ASR 900 Series
Aggregation Services Routers</ns20:productSeries>

<ns20:productFamily>Routers</ns20:productFamily>
                            <ns20:softwareType>IOS-XE</ns20:softwareType>
                        </ns20:ciscoManagedElementExtension>
                    </ns5:vendorExtensions>
                    <ns6:resourceState
extension="MANAGED_AND_SYNCHRONIZED">VENDOR_EXT</ns6:resourceState>
                    <ns8:location>CISCO</ns8:location>
                    <ns8:productName>Cisco ASR 903
Router</ns8:productName>
                    <ns8:softwareVersion>15.5(1)S</ns8:softwareVersion>
                    <ns8:isInSyncState>true</ns8:isInSyncState>

<ns8:communicationState>CS_AVAILABLE</ns8:communicationState>
                </ns8:me>
                <ns8:me>
                    <ns5:name>
                        <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>prime-asr9k-cluster</ns3:value>
                        </ns3:rdn>
                    </ns5:name>
                    <ns5:discoveredName>prime-asr9k-
cluster</ns5:discoveredName>
                    <ns5:owner>vvenunat@cisco.com</ns5:owner>
```

```
                    <ns5:vendorExtensions>
                        <ns20:ciscoManagedElementExtension>

<ns20:networkElementId>763770</ns20:networkElementId>
                            <ns20:description>Cisco IOS XR Software (Cisco
ASR9K Series), Version 5.1.3[Default]
                                Copyright (c) 2014 by Cisco Systems, Inc.
                            </ns20:description>

<ns20:managementAddress>172.23.222.223</ns20:managementAddress>
                            <ns20:lastBootTime>2015-05-02T15:28:26.690-
07:00</ns20:lastBootTime>
                            <ns20:creationTime>2015-07-24T20:47:33.220-
07:00</ns20:creationTime>
                            <ns20:collectionTime>2015-07-24T21:01:07.622-
07:00</ns20:collectionTime>

<ns20:collectionStatus>UNKNOWN</ns20:collectionStatus>

<ns20:sysObjectId>1.3.6.1.4.1.9.1.1018</ns20:sysObjectId>
                            <ns20:sysUpTime>94 days,
6:31:35.16</ns20:sysUpTime>
                            <ns20:productSeries>Cisco ASR 9000 Series
Aggregation Services Routers</ns20:productSeries>

<ns20:productFamily>Routers</ns20:productFamily>
                            <ns20:satelliteCount>1</ns20:satelliteCount>
                            <ns20:clusterCount>2</ns20:clusterCount>
                        </ns20:ciscoManagedElementExtension>
                    </ns5:vendorExtensions>
                    <ns6:resourceState
extension="MANAGED_BUT_OUTOFSYNC">VENDOR_EXT</ns6:resourceState>
                    <ns8:location>CISCO-SJ</ns8:location>
                    <ns8:productName>Cisco ASR 9006
Router</ns8:productName>
                    <ns8:isInSyncState>false</ns8:isInSyncState>

<ns8:communicationState>CS_AVAILABLE</ns8:communicationState>
                </ns8:me>
                <ns8:me>
                    <ns5:name>
                        <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>prime-asr9010-6</ns3:value>
                        </ns3:rdn>
                    </ns5:name>
                    <ns5:discoveredName>prime-asr9010-
6</ns5:discoveredName>
                    <ns5:vendorExtensions>
                        <ns20:ciscoManagedElementExtension>

<ns20:networkElementId>763768</ns20:networkElementId>
```

```
                              <ns20:description>Cisco IOS XR Software (Cisco
ASR9K Series), Version 4.3.4[Default]
                                  Copyright (c) 2013 by Cisco Systems, Inc.
                              </ns20:description>

<ns20:managementAddress>172.23.222.249</ns20:managementAddress>
                              <ns20:lastBootTime>2015-07-29T17:09:00.365-
07:00</ns20:lastBootTime>
                              <ns20:creationTime>2015-07-24T20:47:33.227-
07:00</ns20:creationTime>
                              <ns20:collectionTime>2015-08-04T22:28:42.887-
07:00</ns20:collectionTime>

<ns20:collectionStatus>FAILED_FEAT</ns20:collectionStatus>

<ns20:sysObjectId>1.3.6.1.4.1.9.1.1017</ns20:sysObjectId>
                              <ns20:sysUpTime>6 days,
4:51:06.20</ns20:sysUpTime>
                              <ns20:productSeries>Cisco ASR 9000 Series
Aggregation Services Routers</ns20:productSeries>

<ns20:productFamily>Routers</ns20:productFamily>
                              <ns20:softwareType>IOS XR</ns20:softwareType>
                          </ns20:ciscoManagedElementExtension>
                      </ns5:vendorExtensions>
                      <ns6:resourceState
extension="MANAGED_BUT_OUTOFSYNC">VENDOR_EXT</ns6:resourceState>
                      <ns8:productName>Cisco ASR 9010
Router</ns8:productName>

<ns8:softwareVersion>4.3.4[Default]</ns8:softwareVersion>
                      <ns8:isInSyncState>false</ns8:isInSyncState>

<ns8:communicationState>CS_AVAILABLE</ns8:communicationState>
                  </ns8:me>
              </ns4:meList>
          </ns4:getAllManagedElementsResponse>
     </soap:Body>
</soap:Envelope>
```

9.2 getAllManagedElementsIterator

9.2.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/mer/v1">
   <soapenv:Header>
      <v1:header>

<v1:iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=39b76a72-dadc-
401e-be3c-cc8aaa747b89</v1:iteratorReferenceURI>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
```

```
      <v11:getManagedElementsIteratorRequest/>
   </soapenv:Body>
</soapenv:Envelope>
```

9.2.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <soap:Header>
        <header xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
            xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
            xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
            xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
            xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
            xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
            xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
            xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
            xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
            xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
            xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
            xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
            xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
            <requestedBatchSize>4</requestedBatchSize>
            <batchSequenceNumber>2</batchSequenceNumber>
            <batchSequenceEndOfReply>true</batchSequenceEndOfReply>

<iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=39b76a72-dadc-401e-
be3c-cc8aaa747b89
            </iteratorReferenceURI>
        </header>
    </soap:Header>
    <soap:Body>
        <ns4:getManagedElementsIteratorResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
            xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
            xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
            xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
            xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
            xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
```

```
            xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
            xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
            xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
            xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
            xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
            xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
            xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
            xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
            <ns4:meList>
                <ns8:me>
                    <ns5:name>
                        <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                        </ns3:rdn>
                    </ns5:name>
                    <ns5:discoveredName>cvg-scapa-
223.cisco.com</ns5:discoveredName>
                    <ns5:vendorExtensions>
                        <ns20:ciscoManagedElementExtension>

<ns20:networkElementId>1659772</ns20:networkElementId>
                            <ns20:description>Cisco IOS XR Software (NCS-
4000), Version 5.2.41.12I
                                Copyright (c) 2013-2014 by Cisco Systems,
Inc.
                            </ns20:description>

<ns20:managementAddress>10.58.235.223</ns20:managementAddress>
                            <ns20:lastBootTime>2015-08-04T04:14:58.328-
07:00</ns20:lastBootTime>
                            <ns20:creationTime>2015-08-05T00:16:52.951-
07:00</ns20:creationTime>
                            <ns20:collectionTime>2015-08-05T00:33:55.523-
07:00</ns20:collectionTime>

<ns20:collectionStatus>SUCCESS</ns20:collectionStatus>

<ns20:sysObjectId>1.3.6.1.4.1.9.1.1939</ns20:sysObjectId>
                            <ns20:sysUpTime>20:02:48.79</ns20:sysUpTime>
                            <ns20:productSeries>Cisco Network Convergence
System 4000 Series</ns20:productSeries>
                            <ns20:productFamily>Optical
Networking</ns20:productFamily>
                            <ns20:softwareType>IOS XR</ns20:softwareType>
```

```
                        </ns20:ciscoManagedElementExtension>
                    </ns5:vendorExtensions>
                    <ns6:resourceState
extension="MANAGED_AND_SYNCHRONIZED">VENDOR_EXT</ns6:resourceState>
                    <ns8:productName>Cisco NCS 4016</ns8:productName>
                    <ns8:softwareVersion>5.2.41.12I</ns8:softwareVersion>
                    <ns8:isInSyncState>true</ns8:isInSyncState>

<ns8:communicationState>CS_AVAILABLE</ns8:communicationState>
                </ns8:me>
                <ns8:me>
                    <ns5:name>
                        <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                        </ns3:rdn>
                    </ns5:name>
                    <ns5:discoveredName>cvg-scapa-
229.cisco.com</ns5:discoveredName>
                    <ns5:vendorExtensions>
                        <ns20:ciscoManagedElementExtension>

<ns20:networkElementId>1659773</ns20:networkElementId>
                            <ns20:description>Cisco IOS XR Software (NCS-
4000), Version 5.2.41.12I
                                Copyright (c) 2013-2014 by Cisco Systems,
Inc.
                            </ns20:description>

<ns20:managementAddress>10.58.235.229</ns20:managementAddress>
                            <ns20:lastBootTime>2015-08-04T10:00:40.767-
07:00</ns20:lastBootTime>
                            <ns20:creationTime>2015-08-05T18:43:35.291-
07:00</ns20:creationTime>
                            <ns20:collectionTime>2015-08-05T19:00:36.990-
07:00</ns20:collectionTime>

<ns20:collectionStatus>SUCCESS</ns20:collectionStatus>

<ns20:sysObjectId>1.3.6.1.4.1.9.1.1939</ns20:sysObjectId>
                            <ns20:sysUpTime>1 day,
8:43:13.10</ns20:sysUpTime>
                            <ns20:productSeries>Cisco Network Convergence
System 4000 Series</ns20:productSeries>
                            <ns20:productFamily>Optical
Networking</ns20:productFamily>
                            <ns20:softwareType>IOS XR</ns20:softwareType>
                        </ns20:ciscoManagedElementExtension>
                    </ns5:vendorExtensions>
                    <ns6:resourceState
extension="MANAGED_AND_SYNCHRONIZED">VENDOR_EXT</ns6:resourceState>
                    <ns8:productName>Cisco NCS 4016</ns8:productName>
```

```
                    <ns8:softwareVersion>5.2.41.12I</ns8:softwareVersion>
                    <ns8:isInSyncState>true</ns8:isInSyncState>

<ns8:communicationState>CS_AVAILABLE</ns8:communicationState>
                </ns8:me>
            </ns4:meList>
        </ns4:getManagedElementsIteratorResponse>
    </soap:Body>
</soap:Envelope>
```

9.3 getManagedElement

9.3.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getManagedElementRequest>
         <v11:meRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>cvg-scapa-223.cisco.com</v12:value>
            </v12:rdn>
         </v11:meRef>
      </v11:getManagedElementRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.3.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
```

```
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getManagedElementResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/mer/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/com/v1">
         <ns4:me>
            <ns5:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
               </ns3:rdn>
            </ns5:name>
            <ns5:discoveredName>cvg-scapa-
223.cisco.com</ns5:discoveredName>
            <ns5:vendorExtensions>
```

```
                <ns20:ciscoManagedElementExtension>
                   <ns20:networkElementId>1659772</ns20:networkElementId>
                   <ns20:description>Cisco IOS XR Software (NCS-4000),
Version 5.2.41.12I

Copyright (c) 2013-2014 by Cisco Systems, Inc.</ns20:description>

<ns20:managementAddress>10.58.235.223</ns20:managementAddress>
                   <ns20:lastBootTime>2015-08-04T04:14:58.328-
07:00</ns20:lastBootTime>
                   <ns20:creationTime>2015-08-05T00:16:52.951-
07:00</ns20:creationTime>
                   <ns20:collectionTime>2015-08-05T00:33:55.523-
07:00</ns20:collectionTime>
                   <ns20:collectionStatus>SUCCESS</ns20:collectionStatus>

<ns20:sysObjectId>1.3.6.1.4.1.9.1.1939</ns20:sysObjectId>
                   <ns20:sysUpTime>20:02:48.79</ns20:sysUpTime>
                   <ns20:productSeries>Cisco Network Convergence System
4000 Series</ns20:productSeries>
                   <ns20:productFamily>Optical
Networking</ns20:productFamily>
                   <ns20:softwareType>IOS XR</ns20:softwareType>
                </ns20:ciscoManagedElementExtension>
             </ns5:vendorExtensions>
             <ns6:resourceState
extension="MANAGED_AND_SYNCHRONIZED">VENDOR_EXT</ns6:resourceState>
             <ns8:productName>Cisco NCS 4016</ns8:productName>
             <ns8:softwareVersion>5.2.41.12I</ns8:softwareVersion>
             <ns8:isInSyncState>true</ns8:isInSyncState>
             <ns8:communicationState>CS_AVAILABLE</ns8:communicationState>
          </ns4:me>
       </ns4:getManagedElementResponse>
    </soap:Body>
</soap:Envelope>
```

9.4 getAllEquipment

9.4.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
         <v1:requestedBatchSize>8</v1:requestedBatchSize>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllEquipmentRequest>
         <v11:meOrEhRef>
              <v12:rdn>
                <v12:type>MD</v12:type>
                <v12:value>CISCO_EPNM</v12:value>
```

```
                </v12:rdn>
                <v12:rdn>
                 <v12:type>ME</v12:type>
                 <v12:value>ASR9K-MTG</v12:value>
                </v12:rdn>
          </v11:meOrEhRef>
        </v11:getAllEquipmentRequest>
     </soapenv:Body>
  </soapenv:Envelope>
```

9.4.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <header xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
      <requestedBatchSize>8</requestedBatchSize>
      <batchSequenceNumber>1</batchSequenceNumber>
      <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
      <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=1d0290eb-ed7b-
      4c98-88bc-107db6e3ef3a</iteratorReferenceURI>
    </header>
  </soap:Header>
  <soap:Body>
    <ns4:getAllEquipmentResponse
xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
```

```
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=fan1 0/FT0/SP</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>fan1 0/FT0/SP</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>ASR9K Generic Fan</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>7358666</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>59316821</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>
```

```
          <ns6:resourceState extension="up">VENDOR_EXT</ns6:resourceState>

<ns8:expectedEquipmentObjectType>FAN</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevFanASR9KFan</ns8:installedEquipmentObjec
tType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=slot mau 0/0/0/11</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>slot mau 0/0/0/11</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>Ethernet Plug Port Slot</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>18835317</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>58958978</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>

<ns8:expectedEquipmentObjectType>OTHER</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevContainerSFP</ns8:installedEquipmentObje
ctType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
```

```
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=module mau 0/0/0/14</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>module mau 0/0/0/14</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:assemblyNumber>FTLF1318P2BCL-CS</ns23:assemblyNumber>
              <ns23:assemblyRevision>0000</ns23:assemblyRevision>
              <ns23:isFRUable>TRUE</ns23:isFRUable>
              <ns23:entPhysicalIndex>16630349</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>54357690</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>
          <ns6:resourceState
extension="enabled">VENDOR_EXT</ns6:resourceState>

<ns8:expectedEquipmentObjectType>MODULE</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevXFPUnknown</ns8:installedEquipmentObject
Type>
          <ns8:installedSerialNumber>FNS12200H6L
</ns8:installedSerialNumber>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=module 0/0/2;partnumber=A9K-MODULEv</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>module 0/0/2</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>ASR 9000 Virtual Module</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>53899162</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>21500831</ns23:entPhysicalContainedIn>
              <ns23:productId>A9K-MODULEv</ns23:productId>
```

```
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>
          <ns6:resourceState
extension="unknown">VENDOR_EXT</ns6:resourceState>

<ns8:expectedEquipmentObjectType>MODULE</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevModuleA9KMODULEv</ns8:installedEquipment
ObjectType>
          <ns8:installedPartNumber>A9K-MODULEv</ns8:installedPartNumber>
          <ns8:installedSerialNumber>N/A</ns8:installedSerialNumber>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns10:eh>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=chassis ASR-9001;partnumber=ASR-
9001</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>chassis ASR-9001</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns26:ciscoEquipmentHolderExtension>
              <ns26:description>ASR-9001 Chassis</ns26:description>
              <ns26:assemblyNumber>68-4260-02</ns26:assemblyNumber>
              <ns26:assemblyRevision>B0  </ns26:assemblyRevision>
              <ns26:isFRUable>TRUE</ns26:isFRUable>
              <ns26:entPhysicalIndex>24555730</ns26:entPhysicalIndex>
              <ns26:entPhysicalContainedIn>0</ns26:entPhysicalContainedIn>
              <ns26:productId>ASR-9001</ns26:productId>
            </ns26:ciscoEquipmentHolderExtension>
          </ns5:vendorExtensions>
          <ns6:resourceState
extension="enabled">VENDOR_EXT</ns6:resourceState>
          <ns10:holderType>shelf</ns10:holderType>
          <ns10:holderState>UNKNOWN</ns10:holderState>
          <ns10:manufacturer>Cisco Systems Inc.</ns10:manufacturer>
        </ns10:eh>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
```

```
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=slot 0/0</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>slot 0/0</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>Cisco ASR9K Line Card Module
Container</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>26947585</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>24555730</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>

<ns8:expectedEquipmentObjectType>OTHER</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevContainerASR9KLCSlot</ns8:installedEquip
mentObjectType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=module 0/0/CPU0;partnumber=ASR9001-
LC</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>module 0/0/CPU0</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>ASR 9001, Modular Line
Card</ns23:description>
              <ns23:assemblyNumber>00-0000-00</ns23:assemblyNumber>
              <ns23:assemblyRevision> </ns23:assemblyRevision>
```

```
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>62482494</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>26947585</ns23:entPhysicalContainedIn>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>
          <ns6:resourceState
extension="enabled">VENDOR_EXT</ns6:resourceState>

<ns8:expectedEquipmentObjectType>MODULE</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevModuleA9K9001Lc</ns8:installedEquipmentO
bjectType>
          <ns8:installedPartNumber>ASR9001-LC</ns8:installedPartNumber>
          <ns8:installedSerialNumber>FOC1736N07L</ns8:installedSerialNumber>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
          <ns8:installedVersion>V01 </ns8:installedVersion>
          <ns8:manufacturer>Cisco Systems Inc.</ns8:manufacturer>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=daughtercard 0/0/CPU0;partnumber=ASR9001-
LC</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>daughtercard 0/0/CPU0</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description> Modular Linecard Daughter board
</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>5225733</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>62482494</ns23:entPhysicalContainedIn>
              <ns23:productId>ASR9001-LC</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>
          <ns6:resourceState
extension="disabled">VENDOR_EXT</ns6:resourceState>

<ns8:expectedEquipmentObjectType>MODULE</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevModuleASR9KLCDb</ns8:installedEquipmentO
```

```
bjectType>
          <ns8:installedPartNumber>ASR9001-LC</ns8:installedPartNumber>
          <ns8:installedSerialNumber>FOC1736N07L</ns8:installedSerialNumber>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
          <ns8:installedVersion>V01 </ns8:installedVersion>
        </ns8:eq>
      </ns11:eoh>
     </ns4:getAllEquipmentResponse>
  </soap:Body>
</soap:Envelope>
```

9.5 getEquipment

9.5.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
      xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
      xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
      <soapenv:Header>
            <v1:header>
            </v1:header>
      </soapenv:Header>
      <soapenv:Body>
            <v11:getEquipmentRequest>
                  <v11:equipmentOrEhRef>
                        <v12:rdn>
                              <v12:type>MD</v12:type>
                              <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                              <v12:type>ME</v12:type>
                              <v12:value>ASR9K-MTG</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                               <v12:type>EQ</v12:type>
                               <v12:value>name=chassis ASR-
9001;partnumber=ASR-9001</v12:value>
                        </v12:rdn>
                  </v11:equipmentOrEhRef>
            </v11:getEquipmentRequest>
      </soapenv:Body>
</soapenv:Envelope>
```

9.5.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <header xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
```

```
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
    </header>
  </soap:Header>
  <soap:Body>
    <ns4:getEquipmentResponse
xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
```

```
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
      <ns4:equipmentOrEhList>
        <ns10:eh>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=chassis ASR-9001;partnumber=ASR-
9001</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>chassis ASR-9001</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns26:ciscoEquipmentHolderExtension>
              <ns26:description>ASR-9001 Chassis</ns26:description>
              <ns26:assemblyNumber>68-4260-02</ns26:assemblyNumber>
              <ns26:assemblyRevision>B0  </ns26:assemblyRevision>
              <ns26:isFRUable>TRUE</ns26:isFRUable>
              <ns26:entPhysicalIndex>24555730</ns26:entPhysicalIndex>
              <ns26:entPhysicalContainedIn>0</ns26:entPhysicalContainedIn>
              <ns26:productId>ASR-9001</ns26:productId>
            </ns26:ciscoEquipmentHolderExtension>
          </ns5:vendorExtensions>
          <ns6:resourceState
extension="enabled">VENDOR_EXT</ns6:resourceState>
          <ns10:holderType>shelf</ns10:holderType>
          <ns10:holderState>UNKNOWN</ns10:holderState>
          <ns10:manufacturer>Cisco Systems Inc.</ns10:manufacturer>
        </ns10:eh>
      </ns4:equipmentOrEhList>
    </ns4:getEquipmentResponse>
  </soap:Body>
</soap:Envelope>
```

9.6 getContainedEquipment

9.6.1 SOAP Request

```
    <soapenv:Envelope
    xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
      xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
      xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
      <soapenv:Header>
            <v1:header>
            </v1:header>
      </soapenv:Header>
      <soapenv:Body>
```

```
        <v11:getContainedEquipmentRequest>
              <v11:ehRef>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>ME</v12:type>
                        <v12:value>ASR9K-MTG</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>EQ</v12:type>
                        <v12:value>name=chassis ASR-9001;partnumber=ASR-
9001</v12:value>
                    </v12:rdn>
              </v11:ehRef>
        </v11:getContainedEquipmentRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

9.6.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <header xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
    </header>
```

```
  </soap:Header>
  <soap:Body>
    <ns4:getContainedEquipmentResponse
xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=slot 0/0</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>slot 0/0</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>Cisco ASR9K Line Card Module
Container</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
```

```
              <ns23:entPhysicalIndex>26947585</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>24555730</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>

<ns8:expectedEquipmentObjectType>OTHER</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevContainerASR9KLCSlot</ns8:installedEq
uipmentObjectType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=slot 0/PM0</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>slot 0/PM0</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>Cisco ASR9K AC Power Entry Module
Container</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>43665869</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>24555730</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>

<ns8:expectedEquipmentObjectType>OTHER</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevContainerASR9KPowerSupplySlotAC</ns8:
installedEquipmentObjectType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
```

```
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=slot 0/RSP0</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>slot 0/RSP0</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>Cisco ASR9K Route/Switch Processor Module
Container</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>28091685</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>24555730</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>

<ns8:expectedEquipmentObjectType>OTHER</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevContainerASR9KRSPSlot</ns8:installedE
quipmentObjectType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=slot 0/PM1</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>slot 0/PM1</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>Cisco ASR9K AC Power Entry Module
Container</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>60443482</ns23:entPhysicalIndex>
```

```
<ns23:entPhysicalContainedIn>24555730</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>

<ns8:expectedEquipmentObjectType>OTHER</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevContainerASR9KPowerSupplySlotAC</ns8:
installedEquipmentObjectType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=slot 0/FT0</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>slot 0/FT0</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>Cisco ASR9K FanTray
Container</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>45832162</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>24555730</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>

<ns8:expectedEquipmentObjectType>OTHER</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevContainerASR9KFanTraySlot</ns8:instal
ledEquipmentObjectType>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
    </ns4:getContainedEquipmentResponse>
  </soap:Body>
</soap:Envelope>
```

9.7 getEquipmentIterator

9.7.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/eir/v1">
   <soapenv:Header>
      <v1:header>
         <v1:requestedBatchSize>2</v1:requestedBatchSize>
      <v1:iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=7c9506f0-
c47f-45c6-b47f-22f4f404a00f</v1:iteratorReferenceURI>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getEquipmentIteratorRequest></v11:getEquipmentIteratorRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.7.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>2</requestedBatchSize>
         <batchSequenceNumber>2</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=7c9506f0-
c47f-45c6-b47f-22f4f404a00f</iteratorReferenceURI>
      </header>
   </soap:Header>
```

```
   <soap:Body>
      <ns4:getEquipmentIteratorResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/eir/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/eq-inv/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1">

     <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=module mau 0/0/0/14</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>module mau 0/0/0/14</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:assemblyNumber>FTLF1318P2BCL-CS</ns23:assemblyNumber>
              <ns23:assemblyRevision>0000</ns23:assemblyRevision>
              <ns23:isFRUable>TRUE</ns23:isFRUable>
              <ns23:entPhysicalIndex>16630349</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>54357690</ns23:entPhysicalContainedIn>
              <ns23:productId>N/A</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>
```

```
          <ns6:resourceState
extension="enabled">VENDOR_EXT</ns6:resourceState>

<ns8:expectedEquipmentObjectType>MODULE</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevXFPUnknown</ns8:installedEquipmentObject
Type>
          <ns8:installedSerialNumber>FNS12200H6L
</ns8:installedSerialNumber>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      <ns11:eoh>
        <ns8:eq>
          <ns5:name>
            <ns3:rdn>
              <ns3:type>MD</ns3:type>
              <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>ME</ns3:type>
              <ns3:value>ASR9K-MTG</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
              <ns3:type>EQ</ns3:type>
              <ns3:value>name=module 0/0/2;partnumber=A9K-MODULEv</ns3:value>
            </ns3:rdn>
          </ns5:name>
          <ns5:discoveredName>module 0/0/2</ns5:discoveredName>
          <ns5:vendorExtensions>
            <ns23:ciscoEquipmentExtension>
              <ns23:description>ASR 9000 Virtual Module</ns23:description>
              <ns23:isFRUable>FALSE</ns23:isFRUable>
              <ns23:entPhysicalIndex>53899162</ns23:entPhysicalIndex>

<ns23:entPhysicalContainedIn>21500831</ns23:entPhysicalContainedIn>
              <ns23:productId>A9K-MODULEv</ns23:productId>
            </ns23:ciscoEquipmentExtension>
          </ns5:vendorExtensions>
          <ns6:resourceState
extension="unknown">VENDOR_EXT</ns6:resourceState>

<ns8:expectedEquipmentObjectType>MODULE</ns8:expectedEquipmentObjectType>

<ns8:installedEquipmentObjectType>cevModuleA9KMODULEv</ns8:installedEquipment
ObjectType>
          <ns8:installedPartNumber>A9K-MODULEv</ns8:installedPartNumber>
          <ns8:installedSerialNumber>N/A</ns8:installedSerialNumber>

<ns8:resourceFulfillmentState>SERV_NA</ns8:resourceFulfillmentState>
        </ns8:eq>
      </ns11:eoh>
      </ns4:getEquipmentIteratorResponse>
   </soap:Body>
</soap:Envelope>
```

9.8 getAllCrossConnections

9.8.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllCrossConnectionsRequest>
         <v11:meRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
         </v11:meRef>
      </v11:getAllCrossConnectionsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.8.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllCrossConnectionsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:ccList>
            <ns22:cc>
               <ns22:isActive>true</ns22:isActive>
               <ns22:aEndRefList>
                  <ns22:aEndName>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=ODU20/2/0/11;LR=LR_OCH_Data_Unit_2</n
                        s3:value>
```

```
            </ns3:rdn>
         </ns22:aEndName>
      </ns22:aEndRefList>
      <ns22:zEndRefList>
         <ns22:zEndName>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>ME</ns3:type>
               <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>CTP</ns3:type>
               <ns3:value>name=Odu-Group-
               Te64542;LR=LR_OCH_Data_Unit_2</ns3:value>
            </ns3:rdn>
         </ns22:zEndName>
      </ns22:zEndRefList>
      <ns22:connectionId>6</ns22:connectionId>
      <ns22:routeId>NodeId=4863863_10.58.235.229,XcEndPoints=49156</
      ns22:routeId>
      <ns22:vendorExtensions>
         <ns25:ciscoCrossConnectExtension>
            <ns25:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>CC</ns3:type>
                  <ns3:value>6</ns3:value>
               </ns3:rdn>
            </ns25:name>
            <ns25:switchType>ELECTRICAL_CROSS_CONNECT</ns25:switchTy
            pe>
            <ns25:connectionType>DYNAMIC</ns25:connectionType>
            <ns25:circuitId>6</ns25:circuitId>
            <ns25:adminState>UP</ns25:adminState>
            <ns25:operStatus>UP</ns25:operStatus>
         </ns25:ciscoCrossConnectExtension>
      </ns22:vendorExtensions>
   </ns22:cc>
   <ns22:cc>
      <ns22:aEndRefList>
         <ns22:aEndName>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
```

```
                     <ns3:type>ME</ns3:type>
                     <ns3:value>NCS2KA-236-126</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CTP</ns3:type>
                     <ns3:value>name=FPCHAN-4-5-RX-9b1b00e0_0026;FPCHAN-4-
                     5-TX-9b1b00e0_0026;LR=LR_Optical_Channel</ns3:value>
                  </ns3:rdn>
               </ns22:aEndName>
            </ns22:aEndRefList>
            <ns22:zEndRefList>
               <ns22:zEndName>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>NCS2KA-236-126</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CTP</ns3:type>
                     <ns3:value>name=LINEWL-1-2-3-RX-9b1b00e0_0026;LINEWL-
                     1-2-3-TX-
                     9b1b00e0_0026;LR=LR_Optical_Channel</ns3:value>
                  </ns3:rdn>
               </ns22:zEndName>
            </ns22:zEndRefList>
            <ns22:connectionId>TRAIL-TrailUNIDemo</ns22:connectionId>
            <ns22:routeId>NodeId=4863864_10.58.236.126,XcEndPoints=FPCHAN-
4-5-RX-9b1b00e0_0026;FPCHAN-4-5-TX-9b1b00e0_0026,LINEWL-1-2-3-RX-
9b1b00e0_0026&amp;LINEWL-1-2-3-TX-9b1b00e0_0026</ns22:routeId>
            <ns22:vendorExtensions>
               <ns25:ciscoCrossConnectExtension>
                  <ns25:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-126</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CC</ns3:type>
                        <ns3:value>TRAIL-TrailUNIDemo</ns3:value>
                     </ns3:rdn>
                  </ns25:name>
                  <ns25:switchType>OPTICAL_CROSS_CONNECT</ns25:switchType>
                  <ns25:connectionType>PROVISIONED</ns25:connectionType>
                  <ns25:circuitId>TRAIL-TrailUNIDemo</ns25:circuitId>
               </ns25:ciscoCrossConnectExtension>
            </ns22:vendorExtensions>
         </ns22:cc>
      </ns4:ccList>
   </ns4:getAllCrossConnectionsResponse>
```

```
   </soap:Body>
</soap:Envelope>
```

9.9 getAllSubnetworkConnectionsWithTP

9.9.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
   <soapenv:Header>
      <v1:header/>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllSubnetworkConnectionsWithTpRequest>
         <v11:tpRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>cvg-frodo-234.cisco.com</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>CTP</v12:type>
               <v12:value>name=Odu-Group-
               Te64548;LR=LR_OCH_Data_Unit_2</v12:value>
             </v12:rdn>
         </v11:tpRef>
      </v11:getAllSubnetworkConnectionsWithTpRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.9.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
    xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
    xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
    xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
    xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
    xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
    xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
    xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
    xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
    xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
    xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
    xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
    xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
    xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
    xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
    xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
```

```
 xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
 xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
 xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
 xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
 xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
 xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
 xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
 xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
 xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
 xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
 xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
 xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
 xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
 xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
      <requestedBatchSize>100</requestedBatchSize>
      <batchSequenceNumber>1</batchSequenceNumber>
      <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
   </header>
</soap:Header>
<soap:Body>
   <ns4:getAllSubnetworkConnectionsWithTpResponse
 xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
 xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
 xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
 xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
 xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
 xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
 xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
 xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
 xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
 xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
 xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
 xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
 xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
 xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
 xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
 xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
 xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
 xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
 xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
 xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
 xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
 xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
 xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
 xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
 xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
 xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
 xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
 xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
 xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
 xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
      <ns4:sncList>
         <ns9:snc>
            <ns6:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
```

```
            <ns3:value>CISCO_EPNM</ns3:value>
         </ns3:rdn>
         <ns3:rdn>
            <ns3:type>SNC</ns3:type>
            <ns3:value>TenGEgfpPMDONOTREMOVE</ns3:value>
         </ns3:rdn>
      </ns6:name>
      <ns6:userLabel>TenGEgfpPMDONOTREMOVE</ns6:userLabel>
      <ns6:discoveredName>TenGEgfpPMDONOTREMOVE</ns6:discoveredName>
      <ns6:vendorExtensions>
         <ns24:ciscoSubnetworkConnectionExtension>
            <ns24:adminState>UP</ns24:adminState>
            <ns24:circuitId>0</ns24:circuitId>
            <ns24:layerRate>LR_OCH_DATA_UNIT_2</ns24:layerRate>
            <ns24:operStatus>UP</ns24:operStatus>
            <ns24:name>TenGEgfpPMDONOTREMOVE</ns24:name>
            <ns24:type>UNKNOWN</ns24:type>
         </ns24:ciscoSubnetworkConnectionExtension>
      </ns6:vendorExtensions>
      <ns9:layerRate>LR_OCH_Data_Unit_2</ns9:layerRate>
      <ns9:aEndTpDataList>
         <ns10:tpData>
            <ns10:tpRef>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>CTP</ns3:type>
                  <ns3:value>name=Odu-Group-
                  Te64548;LR=LR_OCH_Data_Unit_2</ns3:value>
               </ns3:rdn>
            </ns10:tpRef>
            <ns11:transmissionParametersList xsi:nil="true"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
         </ns10:tpData>
      </ns9:aEndTpDataList>
      <ns9:zEndTpDataList>
         <ns10:tpData>
            <ns10:tpRef>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>CTP</ns3:type>
                  <ns3:value>name=Odu-Group-
                  Te0;LR=LR_OCH_Data_Unit_2</ns3:value>
```

```
            </ns3:rdn>
         </ns10:tpRef>
         <ns11:transmissionParametersList xsi:nil="true"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
      </ns10:tpData>
   </ns9:zEndTpDataList>
   <ns9:correlationIdentifier>0</ns9:correlationIdentifier>
</ns9:snc>
<ns9:snc>
   <ns6:name>
      <ns3:rdn>
         <ns3:type>MD</ns3:type>
         <ns3:value>CISCO_EPNM</ns3:value>
      </ns3:rdn>
      <ns3:rdn>
         <ns3:type>SNC</ns3:type>
         <ns3:value>ODU UNI-TenGEgfpPMDONOTREMOVE</ns3:value>
      </ns3:rdn>
   </ns6:name>
   <ns6:userLabel>ODU UNI-TenGEgfpPMDONOTREMOVE</ns6:userLabel>
   <ns6:discoveredName>ODU UNI-
   TenGEgfpPMDONOTREMOVE</ns6:discoveredName>
   <ns6:vendorExtensions>
      <ns24:ciscoSubnetworkConnectionExtension>
         <ns24:adminState>UP</ns24:adminState>
         <ns24:circuitId>ODU UNI-0</ns24:circuitId>
         <ns24:layerRate>LR_DSR_10GIGABIT_ETHERNET</ns24:layerRat
         e>
         <ns24:operStatus>UP</ns24:operStatus>
         <ns24:name>ODU UNI-TenGEgfpPMDONOTREMOVE</ns24:name>
         <ns24:type>UNKNOWN</ns24:type>
      </ns24:ciscoSubnetworkConnectionExtension>
   </ns6:vendorExtensions>
   <ns9:layerRate>LR_DSR_10Gigabit_Ethernet</ns9:layerRate>
   <ns9:aEndTpDataList>
      <ns10:tpData>
         <ns10:tpRef>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>ME</ns3:type>
               <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>FTP</ns3:type>
               <ns3:value>name=TenGigECtrlr0/2/0/2;LR=LR_DSR_10Gi
               gabit_Ethernet</ns3:value>
            </ns3:rdn>
         </ns10:tpRef>
         <ns11:transmissionParametersList xsi:nil="true"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
      </ns10:tpData>
   </ns9:aEndTpDataList>
   <ns9:zEndTpDataList>
```

```
                <ns10:tpData>
                   <ns10:tpRef>
                      <ns3:rdn>
                         <ns3:type>MD</ns3:type>
                         <ns3:value>CISCO_EPNM</ns3:value>
                      </ns3:rdn>
                      <ns3:rdn>
                         <ns3:type>ME</ns3:type>
                         <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                      </ns3:rdn>
                      <ns3:rdn>
                         <ns3:type>FTP</ns3:type>
                      <ns3:value>name=TenGigECtrlr0/3/0/2;LR=LR_DSR_10Gigab
                      it_Ethernet</ns3:value>
                      </ns3:rdn>
                   </ns10:tpRef>
                   <ns11:transmissionParametersList xsi:nil="true"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                </ns10:tpData>
             </ns9:zEndTpDataList>
             <ns9:correlationIdentifier>ODU UNI-
             0</ns9:correlationIdentifier>
          </ns9:snc>
       </ns4:sncList>
    </ns4:getAllSubnetworkConnectionsWithTpResponse>
 </soap:Body>
</soap:Envelope>
```

9.10 getAllPhysicalTerminationPoints

9.10.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
   <soapenv:Header>
      <v1:header>

            <!--Optional:-->
         <v1:requestedBatchSize>50</v1:requestedBatchSize>


      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllPhysicalTerminationPointsRequest>

      <v11:meRef>

            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
```

```
            <v12:type>ME</v12:type>
            <v12:value>ASR901-CSG-1-DOMAIN3.cisco.com</v12:value>
         </v12:rdn>
      </v11:meRef>

   </v11:getAllPhysicalTerminationPointsRequest>
</soapenv:Body>
   </soapenv:Envelope>
```

9.10.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>50</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=5a354a38-
15b1-4cb2-899c-27a4ab06dc5b</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllPhysicalTerminationPointsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
```

```
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:tpList>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/7;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/7</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:ab</ns22:macAddress>
                        <ns22:mtu>1522</ns22:mtu>
                        <ns22:ifIndex>12</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
```

```
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/4;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/4</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:description>Deployed for EVC
moria</ns22:description>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:a8</ns22:macAddress>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:entAliasMappingIdentifier>Deployed for EVC
moria</ns22:entAliasMappingIdentifier>
                        <ns22:ifIndex>9</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
```

```
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/5;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/5</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:a9</ns22:macAddress>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>10</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/2;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
```

```
<ns6:discoveredName>GigabitEthernet0/2</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:description>##### looped to ASR901-CSG-2-
DOMAIN2 - 10.56.23.25 g0/2 #####</ns22:description>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:a6</ns22:macAddress>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:entAliasMappingIdentifier>##### looped to
ASR901-CSG-2-DOMAIN2 - 10.56.23.25 g0/2
#####</ns22:entAliasMappingIdentifier>
                        <ns22:ifIndex>7</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/3;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/3</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>10000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
```

```
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:a7</ns22:macAddress>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>8</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/0;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:a4</ns22:macAddress>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>5</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
```

```
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/1;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/1</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:a5</ns22:macAddress>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>6</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns9:ptp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
```

```
                        <ns3:rdn>
                           <ns3:type>PTP</ns3:type>
                           <ns3:value>name=ToP0/12;LR=</ns3:value>
                        </ns3:rdn>
                     </ns6:name>
                     <ns6:discoveredName>ToP0/12</ns6:discoveredName>
                     <ns6:vendorExtensions>
                        <ns22:ciscoPtpExtension>
                           <ns22:type>PROPVIRTUAL</ns22:type>
                           <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                           <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                           <ns22:adminStatus>UP</ns22:adminStatus>
                           <ns22:operStatus>UP</ns22:operStatus>
                           <ns22:mtu>9216</ns22:mtu>
                           <ns22:ifIndex>13</ns22:ifIndex>
                           <ns22:locationIndex>0</ns22:locationIndex>
                           <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                           <ns22:isFloatingPep>false</ns22:isFloatingPep>
                        </ns22:ciscoPtpExtension>
                     </ns6:vendorExtensions>
                     <ns7:resourceState>WORKING</ns7:resourceState>
                     <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                  </ns9:ptp>
               </ns14:tp>

            </ns4:tpList>
         </ns4:getAllPhysicalTerminationPointsResponse>
      </soap:Body>
   </soap:Envelope>
```

9.11 getTerminationPointsIterator

9.11.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tpr/v1">
   <soapenv:Header>
      <v1:header>
         <v1:iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=5a354a38-
15b1-4cb2-899c-27a4ab06dc5b</v1:iteratorReferenceURI>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getTerminationPointsIteratorRequest/>
   </soapenv:Body>
    </soapenv:Envelope>
```

9.11.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
```

```
      <header xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>50</requestedBatchSize>
         <batchSequenceNumber>2</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=5a354a38-
15b1-4cb2-899c-27a4ab06dc5b</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getTerminationPointsIteratorResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
```

```
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:tpList>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.212;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.212</ns6:discoveredNam
e>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>29</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
```

```
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.220;LR=</ns3:value>
                        </ns3:rdn>
                     </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.220</ns6:discoveredNam
e>
                     <ns6:vendorExtensions>
                        <ns22:ciscoPtpExtension>
                           <ns22:type>L2VLAN</ns22:type>
                           <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                           <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                           <ns22:adminStatus>UP</ns22:adminStatus>
                           <ns22:operStatus>UP</ns22:operStatus>
                           <ns22:mtu>9216</ns22:mtu>
                           <ns22:ifIndex>30</ns22:ifIndex>
                           <ns22:locationIndex>0</ns22:locationIndex>
                           <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                           <ns22:isFloatingPep>false</ns22:isFloatingPep>
                        </ns22:ciscoPtpExtension>
                     </ns6:vendorExtensions>
                     <ns7:resourceState>WORKING</ns7:resourceState>
                     <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                  </ns12:ftp>
               </ns14:tp>
               <ns14:tp>
                  <ns12:ftp>
                     <ns6:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.210;LR=</ns3:value>
                        </ns3:rdn>
                     </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.210</ns6:discoveredNam
e>
                     <ns6:vendorExtensions>
                        <ns22:ciscoPtpExtension>
```

```
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>27</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Gi0/10-1;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>Gi0/10-1</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
```

```
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/11;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/11</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:macAddress>f8:72:ea:79:0b:af</ns22:macAddress>
                        <ns22:mtu>1522</ns22:mtu>
                        <ns22:ifIndex>4</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=GigabitEthernet0/10;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/10</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
```

```
<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:macAddress>f8:72:ea:79:0b:ae</ns22:macAddress>
                        <ns22:mtu>1522</ns22:mtu>
                        <ns22:ifIndex>3</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.50;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.50</ns6:discoveredName
>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>22</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
```

```
            </ns12:ftp>
         </ns14:tp>
         <ns14:tp>
            <ns12:ftp>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/11.ServiceInstance.1;LR=</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>GigabitEthernet0/11.ServiceInstance.1</ns6:discoveredName
>
               <ns6:vendorExtensions>
                  <ns22:ciscoPtpExtension>
                     <ns22:description>Deployed for EVC
EVPL1690</ns22:description>
                     <ns22:type>L2VLAN</ns22:type>
                     <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                     <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                     <ns22:adminStatus>UP</ns22:adminStatus>
                     <ns22:operStatus>DOWN</ns22:operStatus>
                     <ns22:mtu>1522</ns22:mtu>
                     <ns22:entAliasMappingIdentifier>Deployed for EVC
EVPL1690</ns22:entAliasMappingIdentifier>
                     <ns22:ifIndex>40</ns22:ifIndex>
                     <ns22:locationIndex>0</ns22:locationIndex>
                     <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                     <ns22:isFloatingPep>false</ns22:isFloatingPep>
                  </ns22:ciscoPtpExtension>
               </ns6:vendorExtensions>
               <ns7:resourceState>NON_WORKING</ns7:resourceState>
               <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
            </ns12:ftp>
         </ns14:tp>
         <ns14:tp>
            <ns12:ftp>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
```

```
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Gi0/0-SI:211:211;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>Gi0/0-SI:211:211</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/1.ServiceInstance.20;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/1.ServiceInstance.20</ns6:discoveredName
>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>33</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
```

```
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.66;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.66</ns6:discoveredName
>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>23</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
```

```
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Gi0/8-1;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>Gi0/8-1</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.77;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.77</ns6:discoveredName
>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>24</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
```

```
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.78;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.78</ns6:discoveredName
>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>25</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
```

```
                        <ns3:rdn>
                           <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/0.ServiceInstance.87;LR=</ns3:value>
                        </ns3:rdn>
                     </ns6:name>

<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.87</ns6:discoveredName
>
                     <ns6:vendorExtensions>
                        <ns22:ciscoPtpExtension>
                           <ns22:type>L2VLAN</ns22:type>
                           <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                           <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                           <ns22:adminStatus>UP</ns22:adminStatus>
                           <ns22:operStatus>UP</ns22:operStatus>
                           <ns22:mtu>9216</ns22:mtu>
                           <ns22:ifIndex>26</ns22:ifIndex>
                           <ns22:locationIndex>0</ns22:locationIndex>
                           <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                           <ns22:isFloatingPep>false</ns22:isFloatingPep>
                        </ns22:ciscoPtpExtension>
                     </ns6:vendorExtensions>
                     <ns7:resourceState>WORKING</ns7:resourceState>
                     <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                  </ns12:ftp>
               </ns14:tp>
               <ns14:tp>
                  <ns12:ftp>
                     <ns6:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/8.ServiceInstance.1;LR=</ns3:value>
                        </ns3:rdn>
                     </ns6:name>

<ns6:discoveredName>GigabitEthernet0/8.ServiceInstance.1</ns6:discoveredName>
                     <ns6:vendorExtensions>
                        <ns22:ciscoPtpExtension>
                           <ns22:description>Deployed for EVC
AccessEPL_690</ns22:description>
                           <ns22:type>L2VLAN</ns22:type>
                           <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                           <ns22:isPromiscuous>false</ns22:isPromiscuous>
```

```
<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:mtu>1522</ns22:mtu>
                        <ns22:entAliasMappingIdentifier>Deployed for EVC
AccessEPL_690</ns22:entAliasMappingIdentifier>
                        <ns22:ifIndex>37</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
         </ns4:tpList>
      </ns4:getTerminationPointsIteratorResponse>
   </soap:Body>
    </soap:Envelope>
```

9.12 getAllFloatingTerminationPoints

9.12.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllFloatingTerminationPointsRequest>

            <!-- optional -->
            <v11:meRef>

            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>ASR901-CSG-1-DOMAIN3.cisco.com</v12:value>
            </v12:rdn>
         </v11:meRef>

      </v11:getAllFloatingTerminationPointsRequest>
   </soapenv:Body>
```

```
</soapenv:Envelope>
```

9.12.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllFloatingTerminationPointsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
```

```
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:tpList>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/2.ServiceInstance.5;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthernet0/2.ServiceInstance.5</ns6:discoveredNa
me>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:description>Deployed for EVC Access-
EPL01</ns22:description>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:entAliasMappingIdentifier>Deployed for EVC
Access-EPL01</ns22:entAliasMappingIdentifier>
                        <ns22:ifIndex>34</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
```

```
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Vlan1;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>Vlan1</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>PROPVIRTUAL</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>DOWN</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:mtu>1500</ns22:mtu>
                        <ns22:ifIndex>14</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Gi0/0-SI:220:220;LR=</ns3:value>
                     </ns3:rdn>
```

```
                  </ns6:name>
                  <ns6:discoveredName>Gi0/0-
SI:220:220</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
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                     </ns3:rdn>
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                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
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                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Vlan50;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>Vlan50</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>PROPVIRTUAL</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:mtu>1500</ns22:mtu>
                        <ns22:ifIndex>43</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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```

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DOMAIN3.cisco.com</ns3:value>
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                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Gi0/0-SI:210:210;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>Gi0/0-
SI:210:210</ns6:discoveredName>
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                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
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DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
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layer</ns6:discoveredName>
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                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
```

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                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>1500</ns22:mtu>
                        <ns22:ifIndex>45</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
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DOMAIN3.cisco.com</ns3:value>
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                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EVPL1690;LR=</ns3:value>
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                  </ns6:name>
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                  <ns6:vendorExtensions>
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                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
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```

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SI:1:1690</ns6:discoveredName>
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                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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                        <ns3:value>CISCO_EPNM</ns3:value>
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DOMAIN3.cisco.com</ns3:value>
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                  <ns6:discoveredName>Gi0/0-
SI:212:212</ns6:discoveredName>
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                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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```

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DOMAIN3.cisco.com</ns3:value>
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<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
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                        <ns22:mtu>1514</ns22:mtu>
                        <ns22:ifIndex>18</ns22:ifIndex>
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                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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DOMAIN3.cisco.com</ns3:value>
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```

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<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
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                        <ns22:mtu>1514</ns22:mtu>
                        <ns22:ifIndex>17</ns22:ifIndex>
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                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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            <ns14:tp>
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                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/7.ServiceInstance.1;LR=</ns3:value>
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<ns6:discoveredName>GigabitEthernet0/7.ServiceInstance.1</ns6:discoveredNa
me>
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EVPL_LS_690</ns22:description>
                        <ns22:type>L2VLAN</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
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                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:mtu>1522</ns22:mtu>
                        <ns22:entAliasMappingIdentifier>Deployed for EVC
EVPL_LS_690</ns22:entAliasMappingIdentifier>
                        <ns22:ifIndex>36</ns22:ifIndex>
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                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
```

```
                  </ns6:vendorExtensions>
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                     </ns3:rdn>
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DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>

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<ns6:discoveredName>GigabitEthernet0/0.ServiceInstance.10</ns6:discoveredN
ame>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
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<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>9216</ns22:mtu>
                        <ns22:ifIndex>21</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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```
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DOMAIN3.cisco.com</ns3:value>
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                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=;LR=</ns3:value>
                     </ns3:rdn>
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                  <ns6:vendorExtensions>
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                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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            <ns14:tp>
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                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
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                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=ST10;LR=</ns3:value>
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                  <ns6:vendorExtensions>
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                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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```

```
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DOMAIN3.cisco.com</ns3:value>
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                        <ns3:type>FTP</ns3:type>
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                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>PROPVIRTUAL</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
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                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>1500</ns22:mtu>
                        <ns22:ifIndex>41</ns22:ifIndex>
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                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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            <ns14:tp>
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                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Gi0/2-5;LR=</ns3:value>
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                  </ns6:name>
                  <ns6:discoveredName>Gi0/2-5</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
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```

```
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EPL_690;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>EPL_690</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
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                     </ns3:rdn>
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                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
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                        <ns3:type>FTP</ns3:type>
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                  </ns6:name>
                  <ns6:discoveredName>Vlan20</ns6:discoveredName>
```

```
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>PROPVIRTUAL</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>1500</ns22:mtu>
                        <ns22:ifIndex>42</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=Vlan263;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>Vlan263</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:type>PROPVIRTUAL</ns22:type>
                        <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:mtu>1500</ns22:mtu>
                        <ns22:ifIndex>44</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
```

```
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
            <ns14:tp>
               <ns12:ftp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=FastEthernet0/0;LR=</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>FastEthernet0/0</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:description>#### MGMT - DO NOT SHUT
####</ns22:description>
                        <ns22:type>ETHERNETCSMACD</ns22:type>
                        <ns22:ifSpeed>100000000</ns22:ifSpeed>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>

<ns22:isConnectorPresent>TRUE</ns22:isConnectorPresent>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>

<ns22:macAddress>f8:72:ea:79:0b:a1</ns22:macAddress>
                        <ns22:mtu>1500</ns22:mtu>
                        <ns22:entAliasMappingIdentifier>#### MGMT - DO NOT
SHUT ####</ns22:entAliasMappingIdentifier>
                        <ns22:ifIndex>15</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns12:ftp>
            </ns14:tp>
         </ns4:tpList>
      </ns4:getAllFloatingTerminationPointsResponse>
   </soap:Body>
</soap:Envelope>
```

9.13 getTerminationPoint

9.13.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getTerminationPointRequest>

         <v11:tpRef>
         <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>ASR901-CSG-1-DOMAIN3.cisco.com</v12:value>
            </v12:rdn>
           <v12:rdn>
               <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/2.ServiceInstance.5;LR=</v12:value>
            </v12:rdn>
         </v11:tpRef>
      </v11:getTerminationPointRequest>
   </soapenv:Body>
    </soapenv:Envelope>
```

9.13.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
```

```
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getTerminationPointResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:tp>
            <ns12:ftp>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>ASR901-CSG-1-DOMAIN3.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FTP</ns3:type>

<ns3:value>name=GigabitEthernet0/2.ServiceInstance.5;LR=</ns3:value>
                  </ns3:rdn>
               </ns6:name>
```

```
<ns6:discoveredName>GigabitEthernet0/2.ServiceInstance.5</ns6:discoveredName>
                <ns6:vendorExtensions>
                   <ns22:ciscoPtpExtension>
                      <ns22:description>Deployed for EVC Access-
EPL01</ns22:description>
                      <ns22:type>L2VLAN</ns22:type>
                      <ns22:ifSpeed>1000000000</ns22:ifSpeed>
                      <ns22:isPromiscuous>false</ns22:isPromiscuous>
                      <ns22:isConnectorPresent>FALSE</ns22:isConnectorPresent>
                      <ns22:adminStatus>UP</ns22:adminStatus>
                      <ns22:operStatus>DOWN</ns22:operStatus>
                      <ns22:mtu>9216</ns22:mtu>
                      <ns22:entAliasMappingIdentifier>Deployed for EVC Access-
EPL01</ns22:entAliasMappingIdentifier>
                      <ns22:ifIndex>34</ns22:ifIndex>
                      <ns22:locationIndex>0</ns22:locationIndex>
                      <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                      <ns22:isFloatingPep>false</ns22:isFloatingPep>
                   </ns22:ciscoPtpExtension>
                </ns6:vendorExtensions>
                <ns7:resourceState>NON_WORKING</ns7:resourceState>
                <ns10:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
             </ns12:ftp>
          </ns4:tp>
       </ns4:getTerminationPointResponse>
    </soap:Body>
     </soap:Envelope>
```

9.14 getAllSupportedPhysicalTerminationPoints

9.14.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllSupportedPhysicalTerminationPointsRequest>
         <v11:equipmentRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>NCS2KA-236-123</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>EQ</v12:type>
```

```
            <v12:value>name=SLOT-2;partnumber=</v12:value>
         </v12:rdn>
      </v11:equipmentRef>
   </v11:getAllSupportedPhysicalTerminationPointsRequest>

</soapenv:Body>
 </soapenv:Envelope>
```

9.14.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllSupportedPhysicalTerminationPointsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
```

```
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:tpList>
            <ns14:tp>
               <ns9:ptp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-123</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-2-2-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>LINE-2-2-TX</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:ifIndex>LINE-2-2-TX</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>
                        <ns10:layerRate>LR_PHYSICAL_OPTICAL</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns9:ptp>
            </ns14:tp>
            <ns14:tp>
               <ns9:ptp>
```

```
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-123</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-2-2-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>LINE-2-2-RX</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>DOWN</ns22:operStatus>
                        <ns22:ifIndex>LINE-2-2-RX</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>NON_WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>
                        <ns10:layerRate>LR_PHYSICAL_OPTICAL</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns9:ptp>
            </ns14:tp>
            <ns14:tp>
               <ns9:ptp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-123</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-2-1-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>LINE-2-1-RX</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
```

```
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:ifIndex>LINE-2-1-RX</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>
                        <ns10:layerRate>LR_PHYSICAL_OPTICAL</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns9:ptp>
            </ns14:tp>
            <ns14:tp>
               <ns9:ptp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-123</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-2-3-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>LINE-2-3-RX</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension>
                        <ns22:isPromiscuous>false</ns22:isPromiscuous>
                        <ns22:adminStatus>UP</ns22:adminStatus>
                        <ns22:operStatus>UP</ns22:operStatus>
                        <ns22:ifIndex>LINE-2-3-RX</ns22:ifIndex>
                        <ns22:locationIndex>0</ns22:locationIndex>
                        <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                        <ns22:isFloatingPep>false</ns22:isFloatingPep>
                     </ns22:ciscoPtpExtension>
                  </ns6:vendorExtensions>
                  <ns7:resourceState>WORKING</ns7:resourceState>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>
                        <ns10:layerRate>LR_PHYSICAL_OPTICAL</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns9:ptp>
            </ns14:tp>
            <ns14:tp>
               <ns9:ptp>
                  <ns6:name>
```

```
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2KA-236-123</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>PTP</ns3:type>
                           <ns3:value>name=LINE-2-3-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                        </ns3:rdn>
                     </ns6:name>
                     <ns6:discoveredName>LINE-2-3-TX</ns6:discoveredName>
                     <ns6:vendorExtensions>
                        <ns22:ciscoPtpExtension>
                           <ns22:isPromiscuous>false</ns22:isPromiscuous>
                           <ns22:adminStatus>UP</ns22:adminStatus>
                           <ns22:operStatus>UP</ns22:operStatus>
                           <ns22:ifIndex>LINE-2-3-TX</ns22:ifIndex>
                           <ns22:locationIndex>0</ns22:locationIndex>
                           <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                           <ns22:isFloatingPep>false</ns22:isFloatingPep>
                           <ns22:alsSetting>
                              <ns22:alsMode>AUTO</ns22:alsMode>

<ns22:recoveryPulseDuration>9.0</ns22:recoveryPulseDuration>

<ns22:recoveryPulseInterval>100.0</ns22:recoveryPulseInterval>
                           </ns22:alsSetting>
                        </ns22:ciscoPtpExtension>
                     </ns6:vendorExtensions>
                     <ns7:resourceState>WORKING</ns7:resourceState>
                     <ns10:transmissionParametersList>
                        <ns10:transmissionParameters>
                           <ns10:layerRate>LR_PHYSICAL_OPTICAL</ns10:layerRate>
                        </ns10:transmissionParameters>
                     </ns10:transmissionParametersList>
                  </ns9:ptp>
               </ns14:tp>
               <ns14:tp>
                  <ns9:ptp>
                     <ns6:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2KA-236-123</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>PTP</ns3:type>
                           <ns3:value>name=LINE-2-1-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
```

```
                  </ns3:rdn>
               </ns6:name>
               <ns6:discoveredName>LINE-2-1-TX</ns6:discoveredName>
               <ns6:vendorExtensions>
                  <ns22:ciscoPtpExtension>
                     <ns22:isPromiscuous>false</ns22:isPromiscuous>
                     <ns22:adminStatus>UP</ns22:adminStatus>
                     <ns22:operStatus>UP</ns22:operStatus>
                     <ns22:ifIndex>LINE-2-1-TX</ns22:ifIndex>
                     <ns22:locationIndex>0</ns22:locationIndex>
                     <ns22:isSpanMonitored>false</ns22:isSpanMonitored>
                     <ns22:isFloatingPep>false</ns22:isFloatingPep>
                  </ns22:ciscoPtpExtension>
               </ns6:vendorExtensions>
               <ns7:resourceState>WORKING</ns7:resourceState>
               <ns10:transmissionParametersList>
                  <ns10:transmissionParameters>
                     <ns10:layerRate>LR_PHYSICAL_OPTICAL</ns10:layerRate>
                  </ns10:transmissionParameters>
               </ns10:transmissionParametersList>
            </ns9:ptp>
         </ns14:tp>
      </ns4:tpList>
   </ns4:getAllSupportedPhysicalTerminationPointsResponse>
</soap:Body>
</soap:Envelope>
```

9.15 getContainedPotentialConnectionTerminationPoints

9.15.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getContainedPotentialConnectionTerminationPointsRequest>

         <v11:tpRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>NCS2KA-236-123</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>PTP</v12:type>
```

```
                <v12:value>name=LINE-2-3-RX&amp;LINE-2-3-
TX;LR=LR_PHYSICAL_OPTICAL</v12:value>
             </v12:rdn>
          </v11:tpRef>

      </v11:getContainedPotentialConnectionTerminationPointsRequest>
   </soapenv:Body>
    </soapenv:Envelope>
```

9.15.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns27="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getContainedPotentialConnectionTerminationPointsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
```

```
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:tpList>
            <ns14:tp>
               <ns13:ctp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-123</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=LINE-2-3-RX&amp;amp;LINE-2-3-
TX;LR=LR_Optical_Transmission_Section</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>LINE-2-3-RX&amp;amp;LINE-2-3-
TX</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension/>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>

<ns10:layerRate>LR_Optical_Transmission_Section</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns13:ctp>
            </ns14:tp>
            <ns14:tp>
               <ns13:ctp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
```

```
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-123</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=LINE-2-3-RX&amp;LINE-2-3-
TX;LR=LR_Optical_Multiplex_Section</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>LINE-2-3-RX&amp;LINE-2-3-
TX</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension/>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>

<ns10:layerRate>LR_Optical_Multiplex_Section</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns13:ctp>
            </ns14:tp>
            <ns14:tp>
               <ns13:ctp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-123</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=LINEWL-2-3-RX-Godzilla&amp;LINEWL-2-
3-TX-Godzilla;LR=LR_Optical_Channel</ns3:value>
                     </ns3:rdn>
                  </ns6:name>
                  <ns6:discoveredName>LINEWL-2-3-RX-Godzilla&amp;LINEWL-2-3-
TX-Godzilla</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension/>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>
                        <ns10:layerRate>LR_Optical_Channel</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns13:ctp>
            </ns14:tp>
         </ns4:tpList>
      </ns4:getContainedPotentialConnectionTerminationPointsResponse>
   </soap:Body>
    </soap:Envelope>
```

9.16 getContainedInUseConnectionTerminationPoints

9.16.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getContainedInUseConnectionTerminationPointsRequest>

         <v11:tpRef>

         <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
             <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>cvg-scapa-223.cisco.com</v12:value>
            </v12:rdn>

             <v12:rdn>
               <v12:type>PTP</v12:type>

<v12:value>name=Optics0/1/0/15;LR=LR_PHYSICAL_OPTICAL</v12:value>
            </v12:rdn>
         </v11:tpRef>

      </v11:getContainedInUseConnectionTerminationPointsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.16.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
```

```
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getContainedInUseConnectionTerminationPointsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tpr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:tpList>
            <ns14:tp>
               <ns13:ctp>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
```

```
                        <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=GigabitEthCtrlr0/1/0/15;LR=LR_DSR_Gigabit_Ethernet</ns3:value
>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>GigabitEthCtrlr0/1/0/15</ns6:discoveredName>
                  <ns6:vendorExtensions>
                     <ns22:ciscoPtpExtension/>
                  </ns6:vendorExtensions>
                  <ns10:transmissionParametersList>
                     <ns10:transmissionParameters>

<ns10:layerRate>LR_DSR_Gigabit_Ethernet</ns10:layerRate>
                     </ns10:transmissionParameters>
                  </ns10:transmissionParametersList>
               </ns13:ctp>
            </ns14:tp>
         </ns4:tpList>
      </ns4:getContainedInUseConnectionTerminationPointsResponse>
   </soap:Body>
    </soap:Envelope>
```

9.17 getAllSubnetworkConnections

9.17.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllSubnetworkConnectionsRequest>
         <v11:mlsnRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
         </v11:mlsnRef>
      </v11:getAllSubnetworkConnectionsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.17.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllSubnetworkConnectionsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
```

```
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:sncList>
            <ns9:snc>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>SNC</ns3:type>
                     <ns3:value>TunnelDeploy</ns3:value>
                  </ns3:rdn>
               </ns6:name>
               <ns6:userLabel>TunnelDeploy</ns6:userLabel>
               <ns6:discoveredName>TunnelDeploy</ns6:discoveredName>
               <ns6:vendorExtensions>
                  <ns24:ciscoSubnetworkConnectionExtension>
                     <ns24:adminState>UP</ns24:adminState>
                     <ns24:circuitId>6</ns24:circuitId>
                     <ns24:layerRate>LR_OCH_DATA_UNIT_0</ns24:layerRate>
                     <ns24:operStatus>UP</ns24:operStatus>
                     <ns24:name>TunnelDeploy</ns24:name>
                     <ns24:type>UNKNOWN</ns24:type>
                  </ns24:ciscoSubnetworkConnectionExtension>
               </ns6:vendorExtensions>
               <ns9:layerRate>LR_OCH_Data_Unit_0</ns9:layerRate>
               <ns9:aEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=Odu-Group-
Te6;LR=LR_OCH_Data_Unit_0</ns3:value>
                        </ns3:rdn>
                     </ns10:tpRef>
```

```
                     <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                  </ns10:tpData>
               </ns9:aEndTpDataList>
               <ns9:zEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=Odu-Group-
Te64547;LR=LR_OCH_Data_Unit_0</ns3:value>
                        </ns3:rdn>
                     </ns10:tpRef>
                     <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                  </ns10:tpData>
               </ns9:zEndTpDataList>
               <ns9:correlationIdentifier>6</ns9:correlationIdentifier>
            </ns9:snc>
            <ns9:snc>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>SNC</ns3:type>
                     <ns3:value>TenGEgfpPMDONOTREMOVE</ns3:value>
                  </ns3:rdn>
               </ns6:name>
               <ns6:userLabel>TenGEgfpPMDONOTREMOVE</ns6:userLabel>
               <ns6:discoveredName>TenGEgfpPMDONOTREMOVE</ns6:discoveredName>
               <ns6:vendorExtensions>
                  <ns24:ciscoSubnetworkConnectionExtension>
                     <ns24:adminState>UP</ns24:adminState>
                     <ns24:circuitId>0</ns24:circuitId>
                     <ns24:layerRate>LR_OCH_DATA_UNIT_2</ns24:layerRate>
                     <ns24:operStatus>UP</ns24:operStatus>
                     <ns24:name>TenGEgfpPMDONOTREMOVE</ns24:name>
                     <ns24:type>UNKNOWN</ns24:type>
                  </ns24:ciscoSubnetworkConnectionExtension>
               </ns6:vendorExtensions>
               <ns9:layerRate>LR_OCH_Data_Unit_2</ns9:layerRate>
               <ns9:aEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
```

```
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=Odu-Group-
Te64548;LR=LR_OCH_Data_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns10:tpRef>
                  <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns10:tpData>
            </ns9:aEndTpDataList>
            <ns9:zEndTpDataList>
               <ns10:tpData>
                  <ns10:tpRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=Odu-Group-
Te0;LR=LR_OCH_Data_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns10:tpRef>
                  <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns10:tpData>
            </ns9:zEndTpDataList>
            <ns9:correlationIdentifier>0</ns9:correlationIdentifier>
         </ns9:snc>
      </ns4:sncList>
   </ns4:getAllSubnetworkConnectionsResponse>
</soap:Body>
</soap:Envelope>
```

9.18 getSubnetworkConnection

9.18.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
```

```
   </soapenv:Header>
   <soapenv:Body>
      <v11:getSubnetworkConnectionRequest>
         <v11:sncRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>SNC</v12:type>
               <v12:value>TRAIL-OCHCC_454E-234-76_1</v12:value>
            </v12:rdn>
         </v11:sncRef>
      </v11:getSubnetworkConnectionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.18.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getSubnetworkConnectionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:snc>
            <ns6:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>SNC</ns3:type>
                  <ns3:value>TRAIL-OCHCC_454E-234-76_1</ns3:value>
               </ns3:rdn>
            </ns6:name>
            <ns6:userLabel>TRAIL-OCHCC_454E-234-76_1</ns6:userLabel>
            <ns6:discoveredName>TRAIL-OCHCC_454E-234-
            76_1</ns6:discoveredName>
            <ns6:vendorExtensions>
               <ns24:ciscoSubnetworkConnectionExtension>
                  <ns24:adminState>UP</ns24:adminState>
                  <ns24:circuitId>TRAIL-OCHCC_454E-234-76_1</ns24:circuitId>
                  <ns24:layerRate>LR_OPTICAL_CHANNEL</ns24:layerRate>
                  <ns24:operStatus>UP</ns24:operStatus>
                  <ns24:name>TRAIL-OCHCC_454E-234-76_1</ns24:name>
                  <ns24:type>UNKNOWN</ns24:type>
                  <ns24:serviceId>283341</ns24:serviceId>
               </ns24:ciscoSubnetworkConnectionExtension>
            </ns6:vendorExtensions>
            <ns9:layerRate>LR_Optical_Channel</ns9:layerRate>
            <ns9:aEndTpDataList>
               <ns10:tpData>
                  <ns10:tpRef>
```

```
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>454E-234-76</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CTP</ns3:type>
                     <ns3:value>name=VFAC-5-8-2-
                     1;LR=LR_Optical_Channel</ns3:value>
                  </ns3:rdn>
               </ns10:tpRef>
               <ns11:transmissionParametersList xsi:nil="true"
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
            </ns10:tpData>
         </ns9:aEndTpDataList>
         <ns9:zEndTpDataList>
            <ns10:tpData>
               <ns10:tpRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>454E-234-71</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CTP</ns3:type>
                     <ns3:value>name=VFAC-5-8-2-
                     1;LR=LR_Optical_Channel</ns3:value>
                  </ns3:rdn>
               </ns10:tpRef>
               <ns11:transmissionParametersList xsi:nil="true"
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
            </ns10:tpData>
         </ns9:zEndTpDataList>
         <ns9:correlationIdentifier>TRAIL-OCHCC_454E-234-
         76_1</ns9:correlationIdentifier>
      </ns4:snc>
   </ns4:getSubnetworkConnectionResponse>
</soap:Body>
</soap:Envelope>
```

9.18.3 SOAP Response – SNC with Diverse From Circuit Reference

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
```

```
xmlns:ns14="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getSubnetworkConnectionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
         <ns4:snc>
            <ns6:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>SNC</ns3:type>
                  <ns3:value>MtosiRedTrailUni</ns3:value>
               </ns3:rdn>
            </ns6:name>
            <ns6:userLabel>MtosiRedTrailUni</ns6:userLabel>
            <ns6:discoveredName>MtosiRedTrailUni</ns6:discoveredName>
            <ns6:vendorExtensions>
               <ns17:ciscoSubnetworkConnectionExtension>
                  <ns17:adminState>UP</ns17:adminState>
                  <ns17:circuitId>3</ns17:circuitId>
                  <ns17:layerRate>LR_OPTICAL_CHANNEL</ns17:layerRate>
                  <ns17:operState>DOWN</ns17:operState>
```

```
                  <ns17:circuitType>OCHTRAIL_UNI</ns17:circuitType>
                  <ns17:diverseFromCircuitRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>SNC</ns3:type>
                        <ns3:value>MtosiGreenTrailUni</ns3:value>
                     </ns3:rdn>
                  </ns17:diverseFromCircuitRef>
               </ns17:ciscoSubnetworkConnectionExtension>
            </ns6:vendorExtensions>
            <ns9:layerRate>LR_Optical_Channel</ns9:layerRate>
            <ns9:aEndTpDataList>
               <ns10:tpData>
                  <ns10:tpRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-222.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=Optics0/14/0/3;LR=LR_Optical_Channel<
/ns3:value>
                     </ns3:rdn>
                  </ns10:tpRef>
                  <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns10:tpData>
            </ns9:aEndTpDataList>
            <ns9:zEndTpDataList>
               <ns10:tpData>
                  <ns10:tpRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-225.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=Optics0/14/0/3;LR=LR_Optical_Channel<
/ns3:value>
                     </ns3:rdn>
                  </ns10:tpRef>
                  <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
               </ns10:tpData>
            </ns9:zEndTpDataList>
```

```
            <ns9:correlationIdentifier>3</ns9:correlationIdentifier>
         </ns4:snc>
      </ns4:getSubnetworkConnectionResponse>
   </soap:Body>
</soap:Envelope>
```

9.19 getSubnetworkConnectionsIterator

9.19.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/conr/v1">
   <soapenv:Header>
      <v1:header>
         <v1:requestedBatchSize>1</v1:requestedBatchSize>
         <v1:iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=f759b271-
         d14a-4e1b-bff2-b59d860e29b4</v1:iteratorReferenceURI>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getSubnetworkConnectionsIteratorRequest/>
   </soapenv:Body>
</soapenv:Envelope>
```

9.19.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
```

```
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>1</requestedBatchSize>
         <batchSequenceNumber>2</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=f759b271-
d14a-4e1b-bff2-b59d860e29b4</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getSubnetworkConnectionsIteratorResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:sncList>
            <ns9:snc>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>SNC</ns3:type>
                     <ns3:value>TenGEgfpPMDONOTREMOVE</ns3:value>
                  </ns3:rdn>
               </ns6:name>
               <ns6:userLabel>TenGEgfpPMDONOTREMOVE</ns6:userLabel>
               <ns6:discoveredName>TenGEgfpPMDONOTREMOVE</ns6:discoveredName>
```

```
                <ns6:vendorExtensions>
                   <ns24:ciscoSubnetworkConnectionExtension>
                      <ns24:adminState>UP</ns24:adminState>
                      <ns24:circuitId>0</ns24:circuitId>
                      <ns24:layerRate>LR_OCH_DATA_UNIT_2</ns24:layerRate>
                      <ns24:operStatus>UP</ns24:operStatus>
                      <ns24:name>TenGEgfpPMDONOTREMOVE</ns24:name>
                      <ns24:type>UNKNOWN</ns24:type>
                   </ns24:ciscoSubnetworkConnectionExtension>
                </ns6:vendorExtensions>
                <ns9:layerRate>LR_OCH_Data_Unit_2</ns9:layerRate>
                <ns9:aEndTpDataList>
                   <ns10:tpData>
                      <ns10:tpRef>
                         <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                         </ns3:rdn>
                         <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                         </ns3:rdn>
                         <ns3:rdn>
                            <ns3:type>CTP</ns3:type>
                            <ns3:value>name=Odu-Group-
                            Te64548;LR=LR_OCH_Data_Unit_2</ns3:value>
                         </ns3:rdn>
                      </ns10:tpRef>
                      <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                   </ns10:tpData>
                </ns9:aEndTpDataList>
                <ns9:zEndTpDataList>
                   <ns10:tpData>
                      <ns10:tpRef>
                         <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                         </ns3:rdn>
                         <ns3:rdn>
                            <ns3:type>ME</ns3:type>
                            <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                         </ns3:rdn>
                         <ns3:rdn>
                            <ns3:type>CTP</ns3:type>
                            <ns3:value>name=Odu-Group-
                            Te0;LR=LR_OCH_Data_Unit_2</ns3:value>
                         </ns3:rdn>
                      </ns10:tpRef>
                      <ns11:transmissionParametersList xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                   </ns10:tpData>
                </ns9:zEndTpDataList>
                <ns9:correlationIdentifier>0</ns9:correlationIdentifier>
             </ns9:snc>
          </ns4:sncList>
```

```
      </ns4:getSubnetworkConnectionsIteratorResponse>
   </soap:Body>
</soap:Envelope>
```

9.20 getRoute

9.20.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getRouteRequest>
         <v11:sncRef>
          <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>SNC</v12:type>
               <v12:value>ODU UNI-TenGEgfpPMDONOTREMOVE</v12:value>
            </v12:rdn>
         </v11:sncRef>
      </v11:getRouteRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.20.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
```

```
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getRouteResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns21="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:route>
            <ns23:ccList>
               <ns22:cc>
                  <ns22:isActive>true</ns22:isActive>
                  <ns22:aEndRefList>
                     <ns22:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
```

```
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>

<ns3:value>name=ODU20/2/0/2;LR=LR_OCH_Data_Unit_2</ns3:value>
                        </ns3:rdn>
                     </ns22:aEndName>
                  </ns22:aEndRefList>

                  <!--  TimeSlot information -->
                  <ns5:timeslot>1</ns5:timeslot>

                  <ns22:zEndRefList>
                     <ns22:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=Odu-Group-
Te0;LR=LR_OCH_Data_Unit_2</ns3:value>
                        </ns3:rdn>
                     </ns22:zEndName>
                  </ns22:zEndRefList>
                  <ns22:connectionId>0</ns22:connectionId>

<ns22:routeId>NodeId=432433_10.58.235.228,XcEndPoints=49151</ns22:routeId>
                  <ns22:vendorExtensions>
                     <ns25:ciscoCrossConnectExtension>
                        <ns25:name>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>0</ns3:value>
                           </ns3:rdn>
                        </ns25:name>

<ns25:switchType>ELECTRICAL_CROSS_CONNECT</ns25:switchType>
                        <ns25:connectionType>DYNAMIC</ns25:connectionType>
                        <ns25:circuitId>0</ns25:circuitId>
                        <ns25:adminState>UP</ns25:adminState>
                        <ns25:operStatus>UP</ns25:operStatus>
<ns25:aEndCCTimeSlotList>
                        <ns25:ccEndPoint>
```

```
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>NCS2006A-234-37</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CTP</ns3:type>
                              <ns3:value>name=CHAN-1-7-2_AGGR-1-7-1-
1;LR=LR_DSR_100Gigabit_Ethernet</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>TIME_SLOT</ns3:type>
                              <ns3:value>1</ns3:value>
                           </ns3:rdn>
                        </ns25:ccEndPoint>
                     </ns25:aEndCCTimeSlotList>
                     <ns25:zEndCCTimeSlotList>
                        <ns25:ccEndPoint>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>NCS2006A-234-37</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>FTP</ns3:type>
                              <ns3:value>name=AGGR-1-7-1-
1;LR=LR_DSR_100Gigabit_Ethernet</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>TIME_SLOT</ns3:type>
                              <ns3:value>1</ns3:value>
                           </ns3:rdn>
                        </ns25:ccEndPoint>
                     </ns25:zEndCCTimeSlotList>

                     </ns25:ciscoCrossConnectExtension>
                  </ns22:vendorExtensions>
               </ns22:cc>
               <ns22:cc>
                  <ns22:isActive>true</ns22:isActive>
                  <ns22:aEndRefList>
                     <ns22:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                        </ns3:rdn>
```

```
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>

<ns3:value>name=ODU20/3/0/2;LR=LR_OCH_Data_Unit_2</ns3:value>
                        </ns3:rdn>
                     </ns22:aEndName>
                  </ns22:aEndRefList>
                  <ns22:zEndRefList>
                     <ns22:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=Odu-Group-
Te64548;LR=LR_OCH_Data_Unit_2</ns3:value>
                        </ns3:rdn>
                     </ns22:zEndName>
                  </ns22:zEndRefList>
                  <ns22:connectionId>0</ns22:connectionId>

<ns22:routeId>NodeId=432435_10.58.235.234,XcEndPoints=49157</ns22:routeId>
                  <ns22:vendorExtensions>
                     <ns25:ciscoCrossConnectExtension>
                        <ns25:name>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>0</ns3:value>
                           </ns3:rdn>
                        </ns25:name>

<ns25:switchType>ELECTRICAL_CROSS_CONNECT</ns25:switchType>
                        <ns25:connectionType>DYNAMIC</ns25:connectionType>
                        <ns25:circuitId>0</ns25:circuitId>
                        <ns25:adminState>UP</ns25:adminState>
                        <ns25:operStatus>UP</ns25:operStatus>
                     </ns25:ciscoCrossConnectExtension>
                  </ns22:vendorExtensions>
               </ns22:cc>
            </ns23:ccList>
         </ns4:route>
      </ns4:getRouteResponse>
   </soap:Body>
```

```
</soap:Envelope>
```

9.21 getAllTopologicalLinks

9.21.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
<soapenv:Header>
<v1:header>
</v1:header>
</soapenv:Header> >
<soapenv:Body>
<v11:getAllTopologicalLinksRequest>
<v11:mlsnRef>
<v12:rdn>
<v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
</v12:rdn>
</v11:mlsnRef>
</v11:getAllTopologicalLinksRequest>
</soapenv:Body>
</soapenv:Envelope>
```

9.21.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns29="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
```

```
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>10</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=7f387865-
b907-45c0-86df-64ca8d0652b3</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllTopologicalLinksResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:tlList>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_70_192.160.80.39</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_70_192.160.80.39</ns5:userLabel>
```

```
               <ns5:discoveredName>LINK PW
100.100.100.5_70_192.160.80.39</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_70_192.160.80.39</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=n_e2e_hvpls_ph2_006</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.235.223:[61]--
10.58.235.229:[56]</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.235.223:[61]--
10.58.235.229:[56]</ns5:userLabel>
               <ns5:discoveredName>10.58.235.223:[61]--
10.58.235.229:[56]</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>10.58.235.223:[61]--
10.58.235.229:[56]</ns23:name>
                     <ns23:layerRate>LR_OCH_TRANSPORT_UNIT_2</ns23:layerRate>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
```

```
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU20/2/0/3;LR=LR_OCH_Transport_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU20/7/0/3;LR=LR_OCH_Transport_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_10_192.169.106.11</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_10_192.169.106.11</ns5:userLabel>
               <ns5:discoveredName>LINK PW
100.100.100.5_10_192.169.106.11</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_10_192.169.106.11</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
```

```
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FTP</ns3:type>
                     <ns3:value>name=EP_LAN_060302_SERVICE</ns3:value>
                  </ns3:rdn>
               </ns3:name>
            </ns8:aEndTpRefList>
            <ns8:zEndTpRefList/>
         </ns8:tl>
         <ns8:tl>
            <ns5:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>TL</ns3:type>
                  <ns3:value>LINK PW
100.100.100.5_206_172.16.1.1</ns3:value>
               </ns3:rdn>
            </ns5:name>
            <ns5:userLabel>LINK PW
100.100.100.5_206_172.16.1.1</ns5:userLabel>
            <ns5:discoveredName>LINK PW
100.100.100.5_206_172.16.1.1</ns5:discoveredName>
            <ns5:vendorExtensions>
               <ns23:ciscoTopologicalLinkExtension>
                  <ns23:name>LINK PW
100.100.100.5_206_172.16.1.1</ns23:name>
               </ns23:ciscoTopologicalLinkExtension>
            </ns5:vendorExtensions>
            <ns8:aEndTpRefList>
               <ns3:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FTP</ns3:type>
                     <ns3:value>name=evplllaaan_CSCut13903</ns3:value>
                  </ns3:rdn>
               </ns3:name>
            </ns8:aEndTpRefList>
            <ns8:zEndTpRefList/>
         </ns8:tl>
         <ns8:tl>
            <ns5:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
```

```
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.235.223:[63]--
10.58.235.229:[58]</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.235.223:[63]--
10.58.235.229:[58]</ns5:userLabel>
               <ns5:discoveredName>10.58.235.223:[63]--
10.58.235.229:[58]</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>10.58.235.223:[63]--
10.58.235.229:[58]</ns23:name>
                     <ns23:layerRate>LR_OCH_TRANSPORT_UNIT_4</ns23:layerRate>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU40/0/0/0;LR=LR_OCH_Transport_Unit_4</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU40/0/0/0;LR=LR_OCH_Transport_Unit_4</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
```

```
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_30_100.100.100.9</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_30_100.100.100.9</ns5:userLabel>
               <ns5:discoveredName>LINK PW
100.100.100.5_30_100.100.100.9</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_30_100.100.100.9</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EVPLAN_NBI-ICCP-verify-2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_4_100.100.100.8</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_4_100.100.100.8</ns5:userLabel>
               <ns5:discoveredName>LINK PW
100.100.100.5_4_100.100.100.8</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
```

```
                     <ns23:name>LINK PW
100.100.100.5_4_100.100.100.8</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EVPLAN_NBI_CP-1</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.235.223:[60]--
10.58.235.229:[55]</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.235.223:[60]--
10.58.235.229:[55]</ns5:userLabel>
               <ns5:discoveredName>10.58.235.223:[60]--
10.58.235.229:[55]</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>10.58.235.223:[60]--
10.58.235.229:[55]</ns23:name>
                     <ns23:layerRate>LR_OCH_TRANSPORT_UNIT_2</ns23:layerRate>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
```

```
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU20/2/0/2;LR=LR_OCH_Transport_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU20/7/0/2;LR=LR_OCH_Transport_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_4_100.100.100.7</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_4_100.100.100.7</ns5:userLabel>
               <ns5:discoveredName>LINK PW
100.100.100.5_4_100.100.100.7</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_4_100.100.100.7</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
```

```
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EVPLAN_NBI_CP-1</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.235.223:[62]--
10.58.235.229:[57]</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.235.223:[62]--
10.58.235.229:[57]</ns5:userLabel>
               <ns5:discoveredName>10.58.235.223:[62]--
10.58.235.229:[57]</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>10.58.235.223:[62]--
10.58.235.229:[57]</ns23:name>
                     <ns23:layerRate>LR_OCH_TRANSPORT_UNIT_2</ns23:layerRate>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU20/2/0/4;LR=LR_OCH_Transport_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
```

```
                        <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU20/7/0/4;LR=LR_OCH_Transport_Unit_2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
         </ns4:tlList>
      </ns4:getAllTopologicalLinksResponse>
   </soap:Body>
</soap:Envelope>
```

9.22 getTopologicalLink

9.22.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getTopologicalLinkRequest>
         <v11:tlRef>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>TL</v12:type>
               <v12:value>10.58.235.223:[63]--10.58.235.229:[58]</v12:value>
            </v12:rdn>
         </v11:tlRef>
      </v11:getTopologicalLinkRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.22.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns29="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
```

```
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getTopologicalLinkResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:tl>
```

```
            <ns5:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>TL</ns3:type>
                  <ns3:value>10.58.235.223:[63]--
10.58.235.229:[58]</ns3:value>
               </ns3:rdn>
            </ns5:name>
            <ns5:userLabel>10.58.235.223:[63]--
10.58.235.229:[58]</ns5:userLabel>
            <ns5:discoveredName>10.58.235.223:[63]--
10.58.235.229:[58]</ns5:discoveredName>
            <ns5:vendorExtensions>
               <ns23:ciscoTopologicalLinkExtension>
                  <ns23:name>10.58.235.223:[63]--
10.58.235.229:[58]</ns23:name>
                  <ns23:layerRate>LR_OCH_TRANSPORT_UNIT_4</ns23:layerRate>
               </ns23:ciscoTopologicalLinkExtension>
            </ns5:vendorExtensions>
            <ns8:aEndTpRefList>
               <ns3:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU40/0/0/0;LR=LR_OCH_Transport_Unit_4</ns3:value>
                  </ns3:rdn>
               </ns3:name>
            </ns8:aEndTpRefList>
            <ns8:zEndTpRefList>
               <ns3:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU40/0/0/0;LR=LR_OCH_Transport_Unit_4</ns3:value>
                  </ns3:rdn>
               </ns3:name>
            </ns8:zEndTpRefList>
```

```
         </ns4:tl>
      </ns4:getTopologicalLinkResponse>
   </soap:Body>
</soap:Envelope>
```

9.23 getTopologicalLinksIterator

9.23.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tlr/v1">
   <soapenv:Header>
      <v1:header>
         <v1:iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=7f387865-
b907-45c0-86df-64ca8d0652b3</v1:iteratorReferenceURI>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getTopologicalLinksIteratorRequest/>
   </soapenv:Body>
</soapenv:Envelope>
```

9.23.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns29="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>10</requestedBatchSize>
         <batchSequenceNumber>2</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=7f387865-
b907-45c0-86df-64ca8d0652b3</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getTopologicalLinksIteratorResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns19="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:tlList>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_10_172.16.2.2</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_10_172.16.2.2</ns5:userLabel>
```

```
               <ns5:discoveredName>LINK PW
100.100.100.5_10_172.16.2.2</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_10_172.16.2.2</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EP_LAN_060302_SERVICE</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_60_192.169.106.11</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_60_192.169.106.11</ns5:userLabel>
               <ns5:discoveredName>LINK PW
100.100.100.5_60_192.169.106.11</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_60_192.169.106.11</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
```

```
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=tc29-trial2</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.235.223:[64]--
10.58.235.229:[59]</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.235.223:[64]--
10.58.235.229:[59]</ns5:userLabel>
               <ns5:discoveredName>10.58.235.223:[64]--
10.58.235.229:[59]</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>10.58.235.223:[64]--
10.58.235.229:[59]</ns23:name>
                     <ns23:layerRate>LR_OCH_TRANSPORT_UNIT_4</ns23:layerRate>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-223.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU40/7/0/0;LR=LR_OCH_Transport_Unit_4</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
```

```
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-scapa-229.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=OTU40/2/0/0;LR=LR_OCH_Transport_Unit_4</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_208_192.168.12.29</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_208_192.168.12.29</ns5:userLabel>
               <ns5:discoveredName>LINK PW
100.100.100.5_208_192.168.12.29</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_208_192.168.12.29</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=case33</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
```

```
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>TL</ns3:type>
                  <ns3:value>LINK PW
100.100.100.5_30_100.100.100.8</ns3:value>
               </ns3:rdn>
            </ns5:name>
            <ns5:userLabel>LINK PW
100.100.100.5_30_100.100.100.8</ns5:userLabel>
            <ns5:discoveredName>LINK PW
100.100.100.5_30_100.100.100.8</ns5:discoveredName>
            <ns5:vendorExtensions>
               <ns23:ciscoTopologicalLinkExtension>
                  <ns23:name>LINK PW
100.100.100.5_30_100.100.100.8</ns23:name>
               </ns23:ciscoTopologicalLinkExtension>
            </ns5:vendorExtensions>
            <ns8:aEndTpRefList>
               <ns3:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FTP</ns3:type>
                     <ns3:value>name=EVPLAN_NBI-ICCP-verify-2</ns3:value>
                  </ns3:rdn>
               </ns3:name>
            </ns8:aEndTpRefList>
            <ns8:zEndTpRefList/>
         </ns8:tl>
         <ns8:tl>
            <ns5:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>TL</ns3:type>
                  <ns3:value>LINK PW
1.1.78.78_131_100.100.100.5</ns3:value>
               </ns3:rdn>
            </ns5:name>
            <ns5:userLabel>LINK PW
1.1.78.78_131_100.100.100.5</ns5:userLabel>
            <ns5:discoveredName>LINK PW
1.1.78.78_131_100.100.100.5</ns5:discoveredName>
            <ns5:vendorExtensions>
               <ns23:ciscoTopologicalLinkExtension>
                  <ns23:name>LINK PW
1.1.78.78_131_100.100.100.5</ns23:name>
```

```
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EPTREE_NBI_FCS-test1</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
100.100.100.5_121_100.100.100.90</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
100.100.100.5_121_100.100.100.90</ns5:userLabel>
               <ns5:discoveredName>LINK PW
100.100.100.5_121_100.100.100.90</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
100.100.100.5_121_100.100.100.90</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EPLAN_NBI_HVPLS-Reg</ns3:value>
                     </ns3:rdn>
```

```
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>100.100.100.5:ICCPGroup2-
4.4.4.4:ICCPGroup2</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>100.100.100.5:ICCPGroup2-
4.4.4.4:ICCPGroup2</ns5:userLabel>
               <ns5:discoveredName>100.100.100.5:ICCPGroup2-
4.4.4.4:ICCPGroup2</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>100.100.100.5:ICCPGroup2-
4.4.4.4:ICCPGroup2</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList/>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>LINK PW
1.1.78.78_123_100.100.100.5</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>LINK PW
1.1.78.78_123_100.100.100.5</ns5:userLabel>
               <ns5:discoveredName>LINK PW
1.1.78.78_123_100.100.100.5</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>LINK PW
1.1.78.78_123_100.100.100.5</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
```

```
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>prime-asr9010-3.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FTP</ns3:type>
                        <ns3:value>name=EPLAN_NBI_HVPLS-Reg111</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList/>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>100.100.100.5:ICCPGroup1-
100.100.100.7:ICCPGroup1</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>100.100.100.5:ICCPGroup1-
100.100.100.7:ICCPGroup1</ns5:userLabel>
               <ns5:discoveredName>100.100.100.5:ICCPGroup1-
100.100.100.7:ICCPGroup1</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns23:ciscoTopologicalLinkExtension>
                     <ns23:name>100.100.100.5:ICCPGroup1-
100.100.100.7:ICCPGroup1</ns23:name>
                  </ns23:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList/>
               <ns8:zEndTpRefList/>
            </ns8:tl>
         </ns4:tlList>
      </ns4:getTopologicalLinksIteratorResponse>
   </soap:Body>
</soap:Envelope>
```

9.24 getRouteAndTopologicalLinks

9.24.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
```

```
   </soapenv:Header>
   <soapenv:Body>
      <v11:getRouteAndTopologicalLinksRequest>
         <!--Optional:-->
         <v11:sncRef>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>

            </v12:rdn>
             <v12:rdn>
               <v12:type>SNC</v12:type>
               <v12:value>TRAIL-OCHCC_454E-234-76_1</v12:value>

            </v12:rdn>

         </v11:sncRef>
      </v11:getRouteAndTopologicalLinksRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.24.2 SOAP Response - OCHTrail

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns20="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getRouteAndTopologicalLinksResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
```

```
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1">
         <ns4:route>
            <ns16:ccList>
               <ns15:cc>
                  <ns15:isActive>false</ns15:isActive>
                  <ns15:aEndRefList>
                     <ns15:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2006A-234-109</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=FPLINE-4-15-RX-alabel&amp;amp;FPLINE-
4-15-TX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns15:aEndName>
                  </ns15:aEndRefList>
                  <ns15:zEndRefList>
                     <ns15:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2006A-234-109</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=LINEWL-1-4-3-RX-alabel&amp;amp;LINEWL-
1-4-3-TX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns15:zEndName>
                  </ns15:zEndRefList>
                  <ns15:connectionId>TRAIL-
OCHTRAILUNI_LUIGI_EP_latest</ns15:connectionId>

<ns15:routeId>NodeId=1746750_10.58.234.109,XcEndPoints=FPLINE-4-15-RX-
```

```
alabel&amp;amp;FPLINE-4-15-TX-alabel,LINEWL-1-4-3-RX-alabel&amp;amp;LINEWL-1-4-3-TX-
alabel</ns15:routeId>
                  <ns15:vendorExtensions>
                     <ns19:ciscoCrossConnectExtension>
                        <ns19:name>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>NCS2006A-234-109</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>TRAIL-
OCHTRAILUNI_LUIGI_EP_latest</ns3:value>
                           </ns3:rdn>
                        </ns19:name>

<ns19:switchType>OPTICAL_CROSS_CONNECT</ns19:switchType>

<ns19:connectionType>PROVISIONED</ns19:connectionType>
                        <ns19:circuitId>TRAIL-
OCHTRAILUNI_LUIGI_EP_latest</ns19:circuitId>
                        <ns19:adminState>UNAVAILABLE</ns19:adminState>
                        <ns19:AEndOpticalPath>
                           <ns19:opticalPathName>LINEWL-1-5-27-RX-
alabel</ns19:opticalPathName>
                        </ns19:AEndOpticalPath>
                        <ns19:ZEndOpticalPath>
                           <ns19:opticalPathName>LINEWL-1-4-3-RX-
alabel</ns19:opticalPathName>
                        </ns19:ZEndOpticalPath>
                     </ns19:ciscoCrossConnectExtension>
                  </ns15:vendorExtensions>
               </ns15:cc>
               <ns15:cc>
                  <ns15:isActive>false</ns15:isActive>
                  <ns15:aEndRefList>
                     <ns15:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2002A-234-110</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=LINEWL-2-3-RX-alabel&amp;amp;LINEWL-2-
3-TX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns15:aEndName>
                  </ns15:aEndRefList>
```

```
                  <ns15:zEndRefList>
                     <ns15:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2002A-234-110</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=LINEWL-3-3-RX-alabel&amp;amp;LINEWL-3-
3-TX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns15:zEndName>
                  </ns15:zEndRefList>
                  <ns15:connectionId>TRAIL-
OCHTRAILUNI_LUIGI_EP_latest</ns15:connectionId>

<ns15:routeId>NodeId=1746748_10.58.234.110,XcEndPoints=LINEWL-2-3-RX-
alabel&amp;amp;LINEWL-2-3-TX-alabel,LINEWL-3-3-RX-alabel&amp;amp;LINEWL-3-3-TX-
alabel</ns15:routeId>
                  <ns15:vendorExtensions>
                     <ns19:ciscoCrossConnectExtension>
                        <ns19:name>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>NCS2002A-234-110</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>TRAIL-
OCHTRAILUNI_LUIGI_EP_latest</ns3:value>
                           </ns3:rdn>
                        </ns19:name>

<ns19:switchType>OPTICAL_CROSS_CONNECT</ns19:switchType>

<ns19:connectionType>PROVISIONED</ns19:connectionType>
                        <ns19:circuitId>TRAIL-
OCHTRAILUNI_LUIGI_EP_latest</ns19:circuitId>
                        <ns19:adminState>UNAVAILABLE</ns19:adminState>
                        <ns19:AEndOpticalPath>
                           <ns19:opticalPathName>LINEWL-3-3-RX-
alabel</ns19:opticalPathName>
                        </ns19:AEndOpticalPath>
                        <ns19:ZEndOpticalPath>
                           <ns19:opticalPathName>LINEWL-2-3-RX-
alabel</ns19:opticalPathName>
                        </ns19:ZEndOpticalPath>
                     </ns19:ciscoCrossConnectExtension>
```

```
                  </ns15:vendorExtensions>
               </ns15:cc>
            </ns16:ccList>
         </ns4:route>
         <ns4:tlList>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.109:LINE-1-4-6-TX--
10.58.234.109:PLINE-2-3-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:LINE-1-4-6-TX--
10.58.234.109:PLINE-2-3-RX</ns5:userLabel>
               <ns5:discoveredName>10.58.234.109:LINE-1-4-6-TX--
10.58.234.109:PLINE-2-3-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.109:LINE-1-4-6-TX--
10.58.234.109:PLINE-2-3-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!--patch chord in reverser direction -->
                     <ns18:orderNumber>5</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-1-4-6-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
```

```
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-2-3-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.109:LINE-1-5-27-TX--
10.58.234.109:PLINE-4-7-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:LINE-1-5-27-TX--
10.58.234.109:PLINE-4-7-RX</ns5:userLabel>
               <ns5:discoveredName>10.58.234.109:LINE-1-5-27-TX--
10.58.234.109:PLINE-4-7-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.109:LINE-1-5-27-TX--
10.58.234.109:PLINE-4-7-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in reverse direction -->
                     <ns18:orderNumber>8</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-1-5-27-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
```

```
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-4-7-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.109:LINE-1-5-3-TX--
10.58.234.109:PLINE-6-23-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:LINE-1-5-3-TX--
10.58.234.109:PLINE-6-23-RX</ns5:userLabel>
               <ns5:discoveredName>10.58.234.109:LINE-1-5-3-TX--
10.58.234.109:PLINE-6-23-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.109:LINE-1-5-3-TX--
10.58.234.109:PLINE-6-23-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in forward direction -->
                     <ns18:orderNumber>2</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
```

```
                        <ns3:value>name=LINE-1-5-3-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-6-23-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.109:PLINE-2-11-TX--
10.58.234.109:PLINE-6-7-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:PLINE-2-11-TX--
10.58.234.109:PLINE-6-7-RX</ns5:userLabel>
               <ns5:discoveredName>10.58.234.109:PLINE-2-11-TX--
10.58.234.109:PLINE-6-7-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.109:PLINE-2-11-TX--
10.58.234.109:PLINE-6-7-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in reverse direction -->
                     <ns18:orderNumber>6</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
```

```
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-2-11-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-6-7-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.109:PLINE-2-3-TX--
10.58.234.109:LINE-1-4-6-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:PLINE-2-3-TX--10.58.234.109:LINE-
1-4-6-RX</ns5:userLabel>
               <ns5:discoveredName>10.58.234.109:PLINE-2-3-TX--
10.58.234.109:LINE-1-4-6-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.109:PLINE-2-3-TX--
10.58.234.109:LINE-1-4-6-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in forward direction -->
                     <ns18:orderNumber>4</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
```

```
                <ns8:aEndTpRefList>
                   <ns3:name>
                      <ns3:rdn>
                         <ns3:type>MD</ns3:type>
                         <ns3:value>CISCO_EPNM</ns3:value>
                      </ns3:rdn>
                      <ns3:rdn>
                         <ns3:type>ME</ns3:type>
                         <ns3:value>NCS2006A-234-109</ns3:value>
                      </ns3:rdn>
                      <ns3:rdn>
                         <ns3:type>PTP</ns3:type>
                         <ns3:value>name=PLINE-2-3-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                      </ns3:rdn>
                   </ns3:name>
                </ns8:aEndTpRefList>
                <ns8:zEndTpRefList>
                   <ns3:name>
                      <ns3:rdn>
                         <ns3:type>MD</ns3:type>
                         <ns3:value>CISCO_EPNM</ns3:value>
                      </ns3:rdn>
                      <ns3:rdn>
                         <ns3:type>ME</ns3:type>
                         <ns3:value>NCS2006A-234-109</ns3:value>
                      </ns3:rdn>
                      <ns3:rdn>
                         <ns3:type>PTP</ns3:type>
                         <ns3:value>name=LINE-1-4-6-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                      </ns3:rdn>
                   </ns3:name>
                </ns8:zEndTpRefList>
             </ns8:tl>
             <ns8:tl>
                <ns5:name>
                   <ns3:rdn>
                      <ns3:type>MD</ns3:type>
                      <ns3:value>CISCO_EPNM</ns3:value>
                   </ns3:rdn>
                   <ns3:rdn>
                      <ns3:type>TL</ns3:type>
                      <ns3:value>10.58.234.109:PLINE-4-7-TX--
10.58.234.109:LINE-1-5-27-RX</ns3:value>
                   </ns3:rdn>
                </ns5:name>
                <ns5:userLabel>10.58.234.109:PLINE-4-7-TX--10.58.234.109:LINE-
1-5-27-RX</ns5:userLabel>
                <ns5:discoveredName>10.58.234.109:PLINE-4-7-TX--
10.58.234.109:LINE-1-5-27-RX</ns5:discoveredName>
                <ns5:vendorExtensions>
                   <ns18:ciscoTopologicalLinkExtension>
                      <ns18:name>10.58.234.109:PLINE-4-7-TX--
10.58.234.109:LINE-1-5-27-RX</ns18:name>
                      <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>
```

```
<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in forward direction -->
                     <ns18:orderNumber>1</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-4-7-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-1-5-27-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.109:PLINE-6-23-TX--
10.58.234.109:LINE-1-5-3-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:PLINE-6-23-TX--
10.58.234.109:LINE-1-5-3-RX</ns5:userLabel>
```

```
               <ns5:discoveredName>10.58.234.109:PLINE-6-23-TX--
10.58.234.109:LINE-1-5-3-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.109:PLINE-6-23-TX--
10.58.234.109:LINE-1-5-3-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in reverse direction -->
                     <ns18:orderNumber>7</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-6-23-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-1-5-3-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
```

```
                     <ns3:value>10.58.234.109:PLINE-6-7-TX--
10.58.234.109:PLINE-2-11-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:PLINE-6-7-TX--
10.58.234.109:PLINE-2-11-RX</ns5:userLabel>
               <ns5:discoveredName>10.58.234.109:PLINE-6-7-TX--
10.58.234.109:PLINE-2-11-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.109:PLINE-6-7-TX--
10.58.234.109:PLINE-2-11-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in forward direction -->
                     <ns18:orderNumber>3</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-6-7-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-109</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=PLINE-2-11-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
            <ns8:tl>
               <ns5:name>
```

```
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.110:LINE-2-1-TX--
10.58.234.110:LINE-3-1-RX</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.110:LINE-2-1-TX--10.58.234.110:LINE-
3-1-RX</ns5:userLabel>
               <ns5:discoveredName>10.58.234.110:LINE-2-1-TX--
10.58.234.110:LINE-3-1-RX</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns18:ciscoTopologicalLinkExtension>
                     <ns18:name>10.58.234.110:LINE-2-1-TX--
10.58.234.110:LINE-3-1-RX</ns18:name>
                     <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
<!-- patch chord in forward direction -->
                     <ns18:orderNumber>2</ns18:orderNumber>
                  </ns18:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2002A-234-110</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-2-1-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2002A-234-110</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>PTP</ns3:type>
                        <ns3:value>name=LINE-3-1-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
```

```
                  </ns3:rdn>
               </ns3:name>
            </ns8:zEndTpRefList>
         </ns8:tl>
         <ns8:tl>
            <ns5:name>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>TL</ns3:type>
                  <ns3:value>10.58.234.110:LINE-3-1-TX--
10.58.234.110:LINE-2-1-RX</ns3:value>
               </ns3:rdn>
            </ns5:name>
            <ns5:userLabel>10.58.234.110:LINE-3-1-TX--10.58.234.110:LINE-
2-1-RX</ns5:userLabel>
            <ns5:discoveredName>10.58.234.110:LINE-3-1-TX--
10.58.234.110:LINE-2-1-RX</ns5:discoveredName>
            <ns5:vendorExtensions>
               <ns18:ciscoTopologicalLinkExtension>
                  <ns18:name>10.58.234.110:LINE-3-1-TX--
10.58.234.110:LINE-2-1-RX</ns18:name>
                  <ns18:layerRate>LR_PHYSICAL_OPTICAL</ns18:layerRate>

<ns18:directionality>UNIDIRECTIONAL</ns18:directionality>
                  <ns18:orderNumber>1</ns18:orderNumber>
               </ns18:ciscoTopologicalLinkExtension>
            </ns5:vendorExtensions>
            <ns8:aEndTpRefList>
               <ns3:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>NCS2002A-234-110</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PTP</ns3:type>
                     <ns3:value>name=LINE-3-1-
TX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                  </ns3:rdn>
               </ns3:name>
            </ns8:aEndTpRefList>
            <ns8:zEndTpRefList>
               <ns3:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>NCS2002A-234-110</ns3:value>
```

```
                    </ns3:rdn>
                    <ns3:rdn>
                       <ns3:type>PTP</ns3:type>
                       <ns3:value>name=LINE-2-1-
RX;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                    </ns3:rdn>
                 </ns3:name>
              </ns8:zEndTpRefList>
           </ns8:tl>
        </ns4:tlList>
     </ns4:getRouteAndTopologicalLinksResponse>
  </soap:Body>
</soap:Envelope>
```

9.24.3 SOAP Response – ODU-UNI

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getRouteAndTopologicalLinksResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
```

```
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns16="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
         <ns4:route>
            <ns18:ccList>
               <ns17:cc>
                  <ns17:isActive>true</ns17:isActive>
                  <ns17:aEndRefList>
                     <ns17:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=ODU-
FLEX0/2/0/12;LR=LR_OCH_Data_Unit_Flexible</ns3:value>
                        </ns3:rdn>
                     </ns17:aEndName>
                  </ns17:aEndRefList>
                  <ns17:zEndRefList>
                     <ns17:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=Odu-Group-
Te4;LR=LR_OCH_Data_Unit_Flexible</ns3:value>
                        </ns3:rdn>
                     </ns17:zEndName>
                  </ns17:zEndRefList>
                  <ns17:connectionId>4</ns17:connectionId>

<ns17:routeId>NodeId=214226_10.58.235.228,XcEndPoints=49156</ns17:routeId>
                  <ns17:vendorExtensions>
                     <ns21:ciscoCrossConnectExtension>
                        <ns21:name>
                           <ns3:rdn>
```

```
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>4</ns3:value>
                           </ns3:rdn>
                        </ns21:name>

<ns21:switchType>ELECTRICAL_CROSS_CONNECT</ns21:switchType>
                        <ns21:connectionType>DYNAMIC</ns21:connectionType>
                        <ns21:circuitId>4</ns21:circuitId>
                        <ns21:adminState>UP</ns21:adminState>
                     </ns21:ciscoCrossConnectExtension>
                  </ns17:vendorExtensions>
               </ns17:cc>
               <ns17:cc>
                  <ns17:isActive>true</ns17:isActive>
                  <ns17:aEndRefList>
                     <ns17:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=ODU-
FLEX0/3/0/3;LR=LR_OCH_Data_Unit_Flexible</ns3:value>
                        </ns3:rdn>
                     </ns17:aEndName>
                  </ns17:aEndRefList>
                  <ns17:zEndRefList>
                     <ns17:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=Odu-Group-
Te64768;LR=LR_OCH_Data_Unit_Flexible</ns3:value>
                        </ns3:rdn>
                     </ns17:zEndName>
                  </ns17:zEndRefList>
```

```
                  <ns17:connectionId>4</ns17:connectionId>

<ns17:routeId>NodeId=214215_10.58.235.234,XcEndPoints=49159</ns17:routeId>
                  <ns17:vendorExtensions>
                     <ns21:ciscoCrossConnectExtension>
                        <ns21:name>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>4</ns3:value>
                           </ns3:rdn>
                        </ns21:name>

<ns21:switchType>ELECTRICAL_CROSS_CONNECT</ns21:switchType>
                        <ns21:connectionType>DYNAMIC</ns21:connectionType>
                        <ns21:circuitId>4</ns21:circuitId>
                        <ns21:adminState>UP</ns21:adminState>
                     </ns21:ciscoCrossConnectExtension>
                  </ns17:vendorExtensions>
               </ns17:cc>
            </ns18:ccList>
         </ns4:route>
         <ns4:tlList>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.235.228:[36]--
10.58.235.234:[55]</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.235.228:[36]--
10.58.235.234:[55]</ns5:userLabel>
               <ns5:discoveredName>10.58.235.228:[36]--
10.58.235.234:[55]</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns20:ciscoTopologicalLinkExtension>
                     <ns20:name>10.58.235.228:[36]--
10.58.235.234:[55]</ns20:name>
                     <ns20:layerRate>LR_OCH_DATA_UNIT_4</ns20:layerRate>
                  </ns20:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
```

```
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-frodo-228.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=ODU40/0/0/1;LR=LR_OCH_Data_Unit_4</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>

<ns3:value>name=ODU40/0/0/0;LR=LR_OCH_Data_Unit_4</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:zEndTpRefList>
            </ns8:tl>
         </ns4:tlList>
      </ns4:getRouteAndTopologicalLinksResponse>
   </soap:Body>
</soap:Envelope>
```

9.24.4 SOAP Response – OCHNC

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
```

```
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getRouteAndTopologicalLinksResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/mri/xsd/tlr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns16="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
         <ns4:route>
            <ns18:ccList>
               <ns17:cc>
                  <ns17:isActive>false</ns17:isActive>
                  <ns17:aEndRefList>
                     <ns17:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2006A-234-109</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=FPLINE-4-15-RX-alabel&amp;amp;LINEWL-
1-2-3-RX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns17:aEndName>
                  </ns17:aEndRefList>
```

```
                  <ns17:zEndRefList>
                     <ns17:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2006A-234-109</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=LINEWL-1-2-3-TX-alabel&amp;amp;FPLINE-
4-15-TX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns17:zEndName>
                  </ns17:zEndRefList>
                  <ns17:connectionId>TRAIL-
MtosiGreenTrailUni</ns17:connectionId>

<ns17:routeId>NodeId=908922_10.58.234.109,XcEndPoints=FPLINE-4-15-RX-
alabel&amp;amp;LINEWL-1-2-3-RX-alabel,LINEWL-1-2-3-TX-alabel&amp;amp;FPLINE-4-15-TX-
alabel</ns17:routeId>
                  <ns17:vendorExtensions>
                     <ns21:ciscoCrossConnectExtension>
                        <ns21:name>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>NCS2006A-234-109</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>TRAIL-MtosiGreenTrailUni</ns3:value>
                           </ns3:rdn>
                        </ns21:name>

<ns21:switchType>OPTICAL_CROSS_CONNECT</ns21:switchType>

<ns21:connectionType>PROVISIONED</ns21:connectionType>
                        <ns21:circuitId>TRAIL-
MtosiGreenTrailUni</ns21:circuitId>
                        <ns21:adminState>UNAVAILABLE</ns21:adminState>
                     </ns21:ciscoCrossConnectExtension>
                  </ns17:vendorExtensions>
               </ns17:cc>
               <ns17:cc>
                  <ns17:isActive>false</ns17:isActive>
                  <ns17:aEndRefList>
                     <ns17:aEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
```

```
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2006A-234-177</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=FPLINE-4-15-RX-alabel&amp;amp;LINEWL-
1-2-3-RX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns17:aEndName>
                  </ns17:aEndRefList>
                  <ns17:zEndRefList>
                     <ns17:zEndName>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2006A-234-177</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=LINEWL-1-2-3-TX-alabel&amp;amp;FPLINE-
4-15-TX-alabel;LR=LR_Optical_Channel</ns3:value>
                        </ns3:rdn>
                     </ns17:zEndName>
                  </ns17:zEndRefList>
                  <ns17:connectionId>TRAIL-
MtosiGreenTrailUni</ns17:connectionId>

<ns17:routeId>NodeId=908929_10.58.234.177,XcEndPoints=FPLINE-4-15-RX-
alabel&amp;amp;LINEWL-1-2-3-RX-alabel,LINEWL-1-2-3-TX-alabel&amp;amp;FPLINE-4-15-TX-
alabel</ns17:routeId>
                  <ns17:vendorExtensions>
                     <ns21:ciscoCrossConnectExtension>
                        <ns21:name>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>NCS2006A-234-177</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CC</ns3:type>
                              <ns3:value>TRAIL-MtosiGreenTrailUni</ns3:value>
                           </ns3:rdn>
                        </ns21:name>

<ns21:switchType>OPTICAL_CROSS_CONNECT</ns21:switchType>

<ns21:connectionType>PROVISIONED</ns21:connectionType>
```

```
                        <ns21:circuitId>TRAIL-
MtosiGreenTrailUni</ns21:circuitId>
                        <ns21:adminState>UNAVAILABLE</ns21:adminState>
                     </ns21:ciscoCrossConnectExtension>
                  </ns17:vendorExtensions>
               </ns17:cc>
            </ns18:ccList>
         </ns4:route>
         <ns4:tlList>
            <ns8:tl>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TL</ns3:type>
                     <ns3:value>10.58.234.109:[WDMSIDE-A]--
10.58.234.177:[WDMSIDE-A]</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:userLabel>10.58.234.109:[WDMSIDE-A]--
10.58.234.177:[WDMSIDE-A]</ns5:userLabel>
               <ns5:discoveredName>10.58.234.109:[WDMSIDE-A]--
10.58.234.177:[WDMSIDE-A]</ns5:discoveredName>
               <ns5:vendorExtensions>
                  <ns20:ciscoTopologicalLinkExtension>
                     <ns20:name>10.58.234.109:[WDMSIDE-A]--
10.58.234.177:[WDMSIDE-A]</ns20:name>

<ns20:layerRate>LR_OPTICAL_TRANSMISSION_SECTION</ns20:layerRate>
                     <ns20:directionality>BIDIRECTIONAL</ns20:directionality>
                  </ns20:ciscoTopologicalLinkExtension>
               </ns5:vendorExtensions>
               <ns8:aEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2006A-234-177</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=LINE-1-2-3-RX&amp;amp;LINE-1-2-3-
TX;LR=LR_Optical_Transmission_Section</ns3:value>
                     </ns3:rdn>
                  </ns3:name>
               </ns8:aEndTpRefList>
               <ns8:zEndTpRefList>
                  <ns3:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
```

```
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                           <ns3:value>NCS2006A-234-109</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CTP</ns3:type>
                           <ns3:value>name=LINE-1-2-3-RX&amp;amp;LINE-1-2-3-
TX;LR=LR_Optical_Transmission_Section</ns3:value>
                        </ns3:rdn>
                     </ns3:name>
                  </ns8:zEndTpRefList>
               </ns8:tl>
            </ns4:tlList>
         </ns4:getRouteAndTopologicalLinksResponse>
      </soap:Body>
</soap:Envelope>
```

9.25 getAllFlowDomainFragments

9.25.1 SOAP Request

```
    <soapenv:Envelope
    xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
    xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
    xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
       <soapenv:Header>
          <v1:header>
             <v1:requestedBatchSize>3</v1:requestedBatchSize>
          </v1:header>
       </soapenv:Header>
       <soapenv:Body>
          <v11:getAllFlowDomainFragmentsRequest>

          </v11:getAllFlowDomainFragmentsRequest>
       </soapenv:Body>
    </soapenv:Envelope>
```

9.25.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
```

```
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>30</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=20ac48e4-
fa51-48ee-bc7a-c226024150c4</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns3:getAllFlowDomainFragmentsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
```

```
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns3:fdfrList>
            <ns8:fdfr>
               <ns5:name>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>FDFR</ns4:type>
                     <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                  </ns4:rdn>
               </ns5:name>
               <ns5:discoveredName>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns5:discoveredName>
               <ns9:transmissionParameters>
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRoutePWEdgeNameList>
                        <ns27:ciscoEvcRouteTransmissionAttributes>
                           <ns27:pwEdge_Name>
                              <ns4:rdn>
                                 <ns4:type>MD</ns4:type>
                                 <ns4:value>CISCO_EPNM</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>FDFR</ns4:type>
                                 <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>MFDFR</ns4:type>
                                 <ns4:value>PW
21.21.21.21_68_16.16.16.16</ns4:value>
                              </ns4:rdn>
                           </ns27:pwEdge_Name>
                        </ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:ciscoEvcRouteTransmissionAttributes>
                           <ns27:pwEdge_Name>
                              <ns4:rdn>
                                 <ns4:type>MD</ns4:type>
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1</ns27:rewriteOuterVlanId>
                                    <ns27:rewriteinnerVlanId>-
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                                    <ns27:mtu>9216</ns27:mtu>
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DOMAIN3.cisco.com</ns4:value>
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                            <ns4:type>CPTP</ns4:type>
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DOMAIN3.cisco.com</ns4:value>
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<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

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1</ns27:rewriteinnerVlanId>

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                                    <ns4:value>CISCO_EPNM</ns4:value>
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                                 <ns4:rdn>
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<ns27:operationalState>UP</ns27:operationalState>
                                    <ns27:mtu>1500</ns27:mtu>
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<ns27:operationalState>UP</ns27:operationalState>
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DOMAIN2.cisco.com</ns4:value>
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                              <ns4:rdn>
                                 <ns4:type>FDFR</ns4:type>

<ns4:value>EvcLink_EthPwLink#EPW_21.21.21.21_482_3.3.3.3</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>MFDFR</ns4:type>
                                 <ns4:value>PW
3.3.3.3_482_21.21.21.21</ns4:value>
                              </ns4:rdn>
                           </ns27:pwEdge_Name>
                        </ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:ciscoEvcRouteTransmissionAttributes>
                           <ns27:pwEdge_Name>
                              <ns4:rdn>
                                 <ns4:type>MD</ns4:type>
                                 <ns4:value>CISCO_EPNM</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>FDFR</ns4:type>

<ns4:value>EvcLink_EthPwLink#EPW_21.21.21.21_482_3.3.3.3</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>MFDFR</ns4:type>
                                 <ns4:value>PW
```

```
21.21.21.21_482_3.3.3.3</ns4:value>
                                 </ns4:rdn>
                              </ns27:pwEdge_Name>
                           </ns27:ciscoEvcRouteTransmissionAttributes>
                        </ns27:ciscoEvcRoutePWEdgeNameList>
                        <ns27:ciscoEvcRouteVFINameList/>
                     </ns9:vendorExtensions>
                  </ns9:transmissionParameters>
                  <ns8:aEndTpDataList>
                     <ns10:tpData>
                        <ns10:tpRef>
                           <ns4:rdn>
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>ME</ns4:type>
                              <ns4:value>ASR901-CSG-2-
DOMAIN2.cisco.com</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>CPTP</ns4:type>
                              <ns4:value>GigabitEthernet0/11 EFPID
482</ns4:value>
                           </ns4:rdn>
                        </ns10:tpRef>
                        <ns9:transmissionParametersList>
                           <ns9:transmissionParameters>
                              <ns9:vendorExtensions>
                                 <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                                    <ns27:svIdList>482</ns27:svIdList>
                                    <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                    <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                    <ns27:vcId>356424</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                    <ns27:mtu>9216</ns27:mtu>
                                 </ns27:ciscoEfpParameters>
                              </ns9:vendorExtensions>
                           </ns9:transmissionParameters>
                           <ns9:transmissionParameters>
                              <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                           </ns9:transmissionParameters>
                        </ns9:transmissionParametersList>
                     </ns10:tpData>
                  </ns8:aEndTpDataList>
                  <ns8:zEndTpDataList>
```

```
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>ASR901-CSG-1-
DOMAIN2.cisco.com</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>CPTP</ns4:type>
                           <ns4:value>GigabitEthernet0/11 EFPID
482</ns4:value>
                        </ns4:rdn>
                     </ns10:tpRef>
                     <ns9:transmissionParametersList>
                        <ns9:transmissionParameters>
                           <ns9:vendorExtensions>
                              <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                                 <ns27:svIdList>482</ns27:svIdList>
                                 <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                 <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>356810</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                 <ns27:mtu>9216</ns27:mtu>
                              </ns27:ciscoEfpParameters>
                           </ns9:vendorExtensions>
                        </ns9:transmissionParameters>
                        <ns9:transmissionParameters>
                           <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                        </ns9:transmissionParameters>
                     </ns9:transmissionParametersList>
                  </ns10:tpData>
               </ns8:zEndTpDataList>
               <ns8:fdfrType>Unknown</ns8:fdfrType>
            </ns8:fdfr>
            <ns8:fdfr>
               <ns5:name>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>FDFR</ns4:type>
```

```
<ns4:value>EvcLink_EthPwLink#EPW_21.21.21.21_287_3.3.3.3</ns4:value>
                  </ns4:rdn>
               </ns5:name>

<ns5:discoveredName>EvcLink_EthPwLink#EPW_21.21.21.21_287_3.3.3.3</ns5:discov
eredName>
               <ns9:transmissionParameters>
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRoutePWEdgeNameList>
                        <ns27:ciscoEvcRouteTransmissionAttributes>
                           <ns27:pwEdge_Name>
                              <ns4:rdn>
                                 <ns4:type>MD</ns4:type>
                                 <ns4:value>CISCO_EPNM</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>FDFR</ns4:type>

<ns4:value>EvcLink_EthPwLink#EPW_21.21.21.21_287_3.3.3.3</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>MFDFR</ns4:type>
                                 <ns4:value>PW
3.3.3.3_287_21.21.21.21</ns4:value>
                              </ns4:rdn>
                           </ns27:pwEdge_Name>
                        </ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:ciscoEvcRouteTransmissionAttributes>
                           <ns27:pwEdge_Name>
                              <ns4:rdn>
                                 <ns4:type>MD</ns4:type>
                                 <ns4:value>CISCO_EPNM</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>FDFR</ns4:type>

<ns4:value>EvcLink_EthPwLink#EPW_21.21.21.21_287_3.3.3.3</ns4:value>
                              </ns4:rdn>
                              <ns4:rdn>
                                 <ns4:type>MFDFR</ns4:type>
                                 <ns4:value>PW
21.21.21.21_287_3.3.3.3</ns4:value>
                              </ns4:rdn>
                           </ns27:pwEdge_Name>
                        </ns27:ciscoEvcRouteTransmissionAttributes>
                     </ns27:ciscoEvcRoutePWEdgeNameList>
                     <ns27:ciscoEvcRouteVFINameList/>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
               <ns8:aEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
```

```
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>ASR901-CSG-1-
DOMAIN2.cisco.com</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>CPTP</ns4:type>
                           <ns4:value>GigabitEthernet0/0 EFPID
287</ns4:value>
                        </ns4:rdn>
                     </ns10:tpRef>
                     <ns9:transmissionParametersList>
                        <ns9:transmissionParameters>
                           <ns9:vendorExtensions>
                              <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                                 <ns27:svIdList>287</ns27:svIdList>
                                 <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                 <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>356796</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                 <ns27:mtu>9216</ns27:mtu>
                              </ns27:ciscoEfpParameters>
                           </ns9:vendorExtensions>
                        </ns9:transmissionParameters>
                        <ns9:transmissionParameters>
                           <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                        </ns9:transmissionParameters>
                     </ns9:transmissionParametersList>
                  </ns10:tpData>
               </ns8:aEndTpDataList>
               <ns8:zEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>ASR901-CSG-2-
DOMAIN2.cisco.com</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
```

```
                              <ns4:type>CPTP</ns4:type>
                              <ns4:value>GigabitEthernet0/0 EFPID
287</ns4:value>
                           </ns4:rdn>
                        </ns10:tpRef>
                        <ns9:transmissionParametersList>
                           <ns9:transmissionParameters>
                              <ns9:vendorExtensions>
                                 <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                                    <ns27:svIdList>287</ns27:svIdList>
                                    <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                    <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                    <ns27:vcId>356434</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                    <ns27:mtu>9216</ns27:mtu>
                                 </ns27:ciscoEfpParameters>
                              </ns9:vendorExtensions>
                           </ns9:transmissionParameters>
                           <ns9:transmissionParameters>
                              <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                           </ns9:transmissionParameters>
                        </ns9:transmissionParametersList>
                     </ns10:tpData>
                  </ns8:zEndTpDataList>
                  <ns8:fdfrType>Unknown</ns8:fdfrType>
               </ns8:fdfr>
            </ns3:fdfrList>
         </ns3:getAllFlowDomainFragmentsResponse>
      </soap:Body>
   </soap:Envelope>
```

9.26 getFlowDomainFragment

9.26.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getFlowDomainFragmentRequest>
```

```
         <v11:fdfrRef>

            <v12:rdn>
               <v12:type>FDFR</v12:type>
               <v12:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</v12:value>
            </v12:rdn>
         </v11:fdfrRef>
      </v11:getFlowDomainFragmentRequest>
   </soapenv:Body>
    </soapenv:Envelope>
```

9.26.2 SOAP Response

```
 <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:getFlowDomainFragmentResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
```

```
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns3:fdfr>
            <ns5:name>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>FDFR</ns4:type>
                  <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
               </ns4:rdn>
            </ns5:name>
            <ns5:discoveredName>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns5:discoveredName>
            <ns9:transmissionParameters>
               <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
               <ns9:vendorExtensions>
                  <ns27:ciscoEvcRoutePWEdgeNameList>
                     <ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:pwEdge_Name>
                           <ns4:rdn>
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>FDFR</ns4:type>
                              <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
```

```
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>MFDFR</ns4:type>
                           <ns4:value>PW
21.21.21.21_68_16.16.16.16</ns4:value>
                        </ns4:rdn>
                     </ns27:pwEdge_Name>
                  </ns27:ciscoEvcRouteTransmissionAttributes>
                  <ns27:ciscoEvcRouteTransmissionAttributes>
                     <ns27:pwEdge_Name>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>FDFR</ns4:type>
                           <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>MFDFR</ns4:type>
                           <ns4:value>PW
21.21.21.21_68_15.15.15.15</ns4:value>
                        </ns4:rdn>
                     </ns27:pwEdge_Name>
                  </ns27:ciscoEvcRouteTransmissionAttributes>
                  <ns27:ciscoEvcRouteTransmissionAttributes>
                     <ns27:pwEdge_Name>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>FDFR</ns4:type>
                           <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>MFDFR</ns4:type>
                           <ns4:value>PW
15.15.15.15_68_3.3.3.3</ns4:value>
                        </ns4:rdn>
                     </ns27:pwEdge_Name>
                  </ns27:ciscoEvcRouteTransmissionAttributes>
                  <ns27:ciscoEvcRouteTransmissionAttributes>
                     <ns27:pwEdge_Name>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>FDFR</ns4:type>
                           <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
```

```
                              <ns4:type>MFDFR</ns4:type>
                              <ns4:value>PW
15.15.15.15_68_21.21.21.21</ns4:value>
                           </ns4:rdn>
                        </ns27:pwEdge_Name>
                     </ns27:ciscoEvcRouteTransmissionAttributes>
                  </ns27:ciscoEvcRoutePWEdgeNameList>
                  <ns27:ciscoEvcRouteVFINameList>
                     <ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:pwEdge_Name>
                           <ns4:rdn>
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>FDFR</ns4:type>
                              <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>MFDFR</ns4:type>
                              <ns4:value>Bridge_37#37#tree-del</ns4:value>
                           </ns4:rdn>
                        </ns27:pwEdge_Name>
                     </ns27:ciscoEvcRouteTransmissionAttributes>
                  </ns27:ciscoEvcRouteVFINameList>
               </ns9:vendorExtensions>
            </ns9:transmissionParameters>
            <ns8:aEndTpDataList>
               <ns10:tpData>
                  <ns10:tpRef>
                     <ns4:rdn>
                        <ns4:type>MD</ns4:type>
                        <ns4:value>CISCO_EPNM</ns4:value>
                     </ns4:rdn>
                     <ns4:rdn>
                        <ns4:type>ME</ns4:type>
                        <ns4:value>ASR901-CSG-2-DOMAIN2.cisco.com</ns4:value>
                     </ns4:rdn>
                     <ns4:rdn>
                        <ns4:type>CPTP</ns4:type>
                        <ns4:value>GigabitEthernet0/6 EFPID 1</ns4:value>
                     </ns4:rdn>
                  </ns10:tpRef>
                  <ns9:transmissionParametersList>
                     <ns9:transmissionParameters>
                        <ns9:vendorExtensions>
                           <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>DEFAULT</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                              <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                              <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>
```

```
<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                              <ns27:vcId>356441</ns27:vcId>

<ns27:operationalState>DOWN</ns27:operationalState>
                              <ns27:mtu>9216</ns27:mtu>
                           </ns27:ciscoEfpParameters>
                        </ns9:vendorExtensions>
                     </ns9:transmissionParameters>
                     <ns9:transmissionParameters>
                        <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                     </ns9:transmissionParameters>
                  </ns9:transmissionParametersList>
               </ns10:tpData>
            </ns8:aEndTpDataList>
            <ns8:fdfrType xsi:nil="true"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
         </ns3:fdfr>
      </ns3:getFlowDomainFragmentResponse>
   </soap:Body>
    </soap:Envelope>
```

9.27 getFlowDomainFragmentRoute

9.27.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getFlowDomainFragmentRouteRequest>

         <v11:fdfrRef>

            <v12:rdn>
               <v12:type>FDFR</v12:type>
               <v12:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</v12:value>
            </v12:rdn>
         </v11:fdfrRef>
      </v11:getFlowDomainFragmentRouteRequest>
   </soapenv:Body>
    </soapenv:Envelope>
```

9.27.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
```

```
      <header xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:getFlowDomainFragmentRouteResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
```

```
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns3:route>
            <ns23:mfdfr>
               <ns9:transmissionParameters>
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:pwEdge_Name>
                           <ns4:rdn>
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>FDFR</ns4:type>
                              <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>MFDFR</ns4:type>
                              <ns4:value>PW
21.21.21.21_68_16.16.16.16</ns4:value>
                           </ns4:rdn>
                        </ns27:pwEdge_Name>

<ns27:pwEdge_LocalRouterIp>21.21.21.21</ns27:pwEdge_LocalRouterIp>

<ns27:pwEdge_PeerRouterIp>16.16.16.16</ns27:pwEdge_PeerRouterIp>
                        <ns27:pwEdge_vcId>68</ns27:pwEdge_vcId>
                        <ns27:pwEdge_Priority>0</ns27:pwEdge_Priority>
                     </ns27:ciscoEvcRouteTransmissionAttributes>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
            </ns23:mfdfr>
            <ns23:mfdfr>
               <ns9:transmissionParameters>
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:pwEdge_Name>
                           <ns4:rdn>
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
```

```
                              <ns4:type>FDFR</ns4:type>
                              <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>MFDFR</ns4:type>
                              <ns4:value>PW
21.21.21.21_68_15.15.15.15</ns4:value>
                           </ns4:rdn>
                        </ns27:pwEdge_Name>

<ns27:pwEdge_LocalRouterIp>21.21.21.21</ns27:pwEdge_LocalRouterIp>

<ns27:pwEdge_PeerRouterIp>15.15.15.15</ns27:pwEdge_PeerRouterIp>
                        <ns27:pwEdge_vcId>68</ns27:pwEdge_vcId>
                        <ns27:pwEdge_Priority>1</ns27:pwEdge_Priority>
                     </ns27:ciscoEvcRouteTransmissionAttributes>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
            </ns23:mfdfr>
            <ns23:mfdfr>
               <ns9:transmissionParameters>
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:pwEdge_Name>
                           <ns4:rdn>
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>FDFR</ns4:type>
                              <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>MFDFR</ns4:type>
                              <ns4:value>PW
15.15.15.15_68_3.3.3.3</ns4:value>
                           </ns4:rdn>
                        </ns27:pwEdge_Name>

<ns27:pwEdge_LocalRouterIp>15.15.15.15</ns27:pwEdge_LocalRouterIp>

<ns27:pwEdge_PeerRouterIp>3.3.3.3</ns27:pwEdge_PeerRouterIp>
                        <ns27:pwEdge_vcId>68</ns27:pwEdge_vcId>
                        <ns27:pwEdge_Priority>0</ns27:pwEdge_Priority>
                     </ns27:ciscoEvcRouteTransmissionAttributes>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
            </ns23:mfdfr>
            <ns23:mfdfr>
               <ns9:transmissionParameters>
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
```

```
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRouteTransmissionAttributes>
                        <ns27:pwEdge_Name>
                           <ns4:rdn>
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>FDFR</ns4:type>
                              <ns4:value>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>MFDFR</ns4:type>
                              <ns4:value>PW
15.15.15.15_68_21.21.21.21</ns4:value>
                           </ns4:rdn>
                        </ns27:pwEdge_Name>

<ns27:pwEdge_LocalRouterIp>15.15.15.15</ns27:pwEdge_LocalRouterIp>

<ns27:pwEdge_PeerRouterIp>21.21.21.21</ns27:pwEdge_PeerRouterIp>
                        <ns27:pwEdge_vcId>68</ns27:pwEdge_vcId>
                        <ns27:pwEdge_Priority>0</ns27:pwEdge_Priority>
                     </ns27:ciscoEvcRouteTransmissionAttributes>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
            </ns23:mfdfr>
            <ns24:vendorExtensions>
               <ns8:aEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>ASR901-CSG-2-
DOMAIN2.cisco.com</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>CPTP</ns4:type>
                           <ns4:value>GigabitEthernet0/6 EFPID 1</ns4:value>
                        </ns4:rdn>
                     </ns10:tpRef>
                     <ns9:transmissionParametersList>
                        <ns9:transmissionParameters>
                           <ns9:vendorExtensions>
                              <ns27:ciscoEfpParameters>
                                 <ns27:vcId>356441</ns27:vcId>
                              </ns27:ciscoEfpParameters>
                           </ns9:vendorExtensions>
                        </ns9:transmissionParameters>
                        <ns9:transmissionParameters>
```

```
                              <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                           </ns9:transmissionParameters>
                        </ns9:transmissionParametersList>
                     </ns10:tpData>
                  </ns8:aEndTpDataList>
               </ns24:vendorExtensions>
            </ns3:route>
         </ns3:getFlowDomainFragmentRouteResponse>
      </soap:Body>
       </soap:Envelope>
```

9.28 getFlowDomainFragmentsIterator

9.28.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/mri/xsd/fdr/v1">
   <soapenv:Header>
      <v1:header>
         <v1:iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=20ac48e4-
fa51-48ee-bc7a-c226024150c4</v1:iteratorReferenceURI>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getFlowDomainFragmentsIteratorRequest/>
   </soapenv:Body>
    </soapenv:Envelope>
```

9.28.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
```

```
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>30</requestedBatchSize>
         <batchSequenceNumber>2</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=20ac48e4-
fa51-48ee-bc7a-c226024150c4</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns3:getFlowDomainFragmentsIteratorResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/mri/xsd/fdr/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns20="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns3:fdfrList>
            <ns8:fdfr>
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                  </ns4:rdn>
                  <ns4:rdn>
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99 1310316_172.23.222.217</ns4:value>
                  </ns4:rdn>
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EFPID 99 1310316_172.23.222.217</ns5:discoveredName>
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                     <ns27:ciscoEvcRouteVFINameList/>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
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                           <ns4:value>prime-asr903-1</ns4:value>
                        </ns4:rdn>
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                        </ns4:rdn>
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<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

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                                 <ns27:svIdList>99</ns27:svIdList>
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1</ns27:rewriteOuterVlanId>
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1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>992594</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                 <ns27:mtu>1522</ns27:mtu>
                              </ns27:ciscoEfpParameters>
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               </ns10:tpData>
            </ns8:aEndTpDataList>
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xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
         </ns8:fdfr>
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extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
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                  <ns27:ciscoEvcRouteVFINameList/>
               </ns9:vendorExtensions>
            </ns9:transmissionParameters>
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                     </ns4:rdn>
                     <ns4:rdn>
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                     </ns4:rdn>
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400</ns4:value>
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<ns27:outerVlanTpId>UNTAGGED</ns27:outerVlanTpId>
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                                    <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                    <ns27:vcId>992589</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                    <ns27:mtu>1500</ns27:mtu>
                                 </ns27:ciscoEfpParameters>
                              </ns9:vendorExtensions>
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                  <ns8:zEndTpDataList>
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                              <ns4:value>prime-asr903-1</ns4:value>
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400</ns4:value>
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<ns27:outerVlanTpId>UNTAGGED</ns27:outerVlanTpId>

<ns27:untaggedDefault>true</ns27:untaggedDefault>
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1</ns27:rewriteOuterVlanId>
                                    <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                    <ns27:vcId>992595</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
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                                    <ns27:mtu>1522</ns27:mtu>
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199 1583585_172.23.222.189</ns4:value>
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extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
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                        <ns27:ciscoEvcRouteVFINameList/>
                     </ns9:vendorExtensions>
                  </ns9:transmissionParameters>
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1</ns27:rewriteOuterVlanId>
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1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                    <ns27:vcId>1588615</ns27:vcId>

<ns27:operationalState>DOWN</ns27:operationalState>
                                    <ns27:mtu>1500</ns27:mtu>
                                 </ns27:ciscoEfpParameters>
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                     </ns10:tpData>
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1583582_172.23.222.107</ns4:value>
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399 1583582_172.23.222.107</ns5:discoveredName>
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                        <ns27:ciscoEvcRouteVFINameList/>
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399</ns4:value>
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<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

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1</ns27:rewriteOuterVlanId>
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1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>1589181</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                 <ns27:mtu>1500</ns27:mtu>
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               </ns8:aEndTpDataList>
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                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>prime-me3600-x2</ns4:value>
                        </ns4:rdn>
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                           <ns4:type>CPTP</ns4:type>
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399</ns4:value>
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<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
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1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                <ns27:vcId>1588597</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                <ns27:mtu>1888</ns27:mtu>
                             </ns27:ciscoEfpParameters>
                          </ns9:vendorExtensions>
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                 </ns4:rdn>
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<ns5:discoveredName>EvcLink_Bridge_401#401</ns5:discoveredName>
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                    <ns27:ciscoEvcRouteVFINameList/>
                 </ns9:vendorExtensions>
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                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
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401</ns4:value>
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<ns27:outerVlanTpId>UNTAGGED</ns27:outerVlanTpId>

<ns27:untaggedDefault>true</ns27:untaggedDefault>
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1</ns27:rewriteOuterVlanId>
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1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>1588598</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
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               <ns8:zEndTpDataList>
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                           <ns4:value>CISCO_EPNM</ns4:value>
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401</ns4:value>
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<ns27:outerVlanTpId>UNTAGGED</ns27:outerVlanTpId>

<ns27:untaggedDefault>true</ns27:untaggedDefault>
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1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>1588596</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                 <ns27:mtu>1888</ns27:mtu>
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            <ns8:fdfr>
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                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>FDFR</ns4:type>
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1583582_172.23.222.107</ns4:value>
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400 1583582_172.23.222.107</ns5:discoveredName>
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extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
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                     <ns27:ciscoEvcRouteVFINameList/>
                  </ns9:vendorExtensions>
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                            <ns4:value>CISCO_EPNM</ns4:value>
                         </ns4:rdn>
                         <ns4:rdn>
                            <ns4:type>ME</ns4:type>
                            <ns4:value>prime-me3600x-1</ns4:value>
                         </ns4:rdn>
                         <ns4:rdn>
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400</ns4:value>
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                      </ns10:tpRef>
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                         <ns9:transmissionParameters>
                            <ns9:vendorExtensions>
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<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
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1</ns27:rewriteOuterVlanId>
                                  <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                  <ns27:vcId>1589187</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                  <ns27:mtu>1500</ns27:mtu>
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extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
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                      </ns9:transmissionParametersList>
                   </ns10:tpData>
                </ns8:aEndTpDataList>
                <ns8:zEndTpDataList>
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                            <ns4:value>CISCO_EPNM</ns4:value>
                         </ns4:rdn>
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400</ns4:value>
                        </ns4:rdn>
                     </ns10:tpRef>
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                           <ns9:vendorExtensions>
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<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                                    <ns27:svIdList>400</ns27:svIdList>
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1</ns27:rewriteOuterVlanId>
                                    <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                    <ns27:vcId>1588595</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                    <ns27:mtu>1888</ns27:mtu>
                                 </ns27:ciscoEfpParameters>
                           </ns9:vendorExtensions>
                        </ns9:transmissionParameters>
                        <ns9:transmissionParameters>
                           <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                        </ns9:transmissionParameters>
                     </ns9:transmissionParametersList>
                  </ns10:tpData>
               </ns8:zEndTpDataList>
               <ns8:fdfrType>Unknown</ns8:fdfrType>
            </ns8:fdfr>
            <ns8:fdfr>
               <ns5:name>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>FDFR</ns4:type>
                     <ns4:value>EvcLink_evpl_gki_0607#99</ns4:value>
                  </ns4:rdn>
               </ns5:name>

<ns5:discoveredName>EvcLink_evpl_gki_0607#99</ns5:discoveredName>
               <ns9:transmissionParameters>
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRoutePWEdgeNameList/>
```

```
                     <ns27:ciscoEvcRouteVFINameList/>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
               <ns8:aEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>ASR903-2</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>CPTP</ns4:type>
                           <ns4:value>GigabitEthernet0/0/4 EFPID
99</ns4:value>
                        </ns4:rdn>
                     </ns10:tpRef>
                     <ns9:transmissionParametersList>
                        <ns9:transmissionParameters>
                           <ns9:vendorExtensions>
                              <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                                 <ns27:svIdList>3</ns27:svIdList>
                                 <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                 <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>1588608</ns27:vcId>

<ns27:operationalState>DOWN</ns27:operationalState>
                                 <ns27:mtu>1500</ns27:mtu>
                              </ns27:ciscoEfpParameters>
                           </ns9:vendorExtensions>
                        </ns9:transmissionParameters>
                        <ns9:transmissionParameters>
                           <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                        </ns9:transmissionParameters>
                     </ns9:transmissionParametersList>
                  </ns10:tpData>
               </ns8:aEndTpDataList>
               <ns8:zEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
```

```
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>ASR903-2</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>CPTP</ns4:type>
                           <ns4:value>GigabitEthernet0/0/5 EFPID
99</ns4:value>
                        </ns4:rdn>
                     </ns10:tpRef>
                     <ns9:transmissionParametersList>
                        <ns9:transmissionParameters>
                           <ns9:vendorExtensions>
                              <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>DOT1Q</ns27:outerVlanTpId>

<ns27:untaggedDefault>false</ns27:untaggedDefault>
                                 <ns27:svIdList>3</ns27:svIdList>
                                 <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                 <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>1588605</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                 <ns27:mtu>1500</ns27:mtu>
                              </ns27:ciscoEfpParameters>
                           </ns9:vendorExtensions>
                        </ns9:transmissionParameters>
                        <ns9:transmissionParameters>
                           <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                        </ns9:transmissionParameters>
                     </ns9:transmissionParametersList>
                  </ns10:tpData>
               </ns8:zEndTpDataList>
               <ns8:fdfrType>Unknown</ns8:fdfrType>
            </ns8:fdfr>
            <ns8:fdfr>
               <ns5:name>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>FDFR</ns4:type>
                     <ns4:value>EvcLink_Bridge_400#400</ns4:value>
                  </ns4:rdn>
               </ns5:name>

<ns5:discoveredName>EvcLink_Bridge_400#400</ns5:discoveredName>
               <ns9:transmissionParameters>
```

```
                  <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                  <ns9:vendorExtensions>
                     <ns27:ciscoEvcRoutePWEdgeNameList/>
                     <ns27:ciscoEvcRouteVFINameList/>
                  </ns9:vendorExtensions>
               </ns9:transmissionParameters>
               <ns8:aEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
                           <ns4:type>MD</ns4:type>
                           <ns4:value>CISCO_EPNM</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>ME</ns4:type>
                           <ns4:value>ASR903-2</ns4:value>
                        </ns4:rdn>
                        <ns4:rdn>
                           <ns4:type>CPTP</ns4:type>
                           <ns4:value>GigabitEthernet0/0/4 EFPID
400</ns4:value>
                        </ns4:rdn>
                     </ns10:tpRef>
                     <ns9:transmissionParametersList>
                        <ns9:transmissionParameters>
                           <ns9:vendorExtensions>
                              <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>UNTAGGED</ns27:outerVlanTpId>

<ns27:untaggedDefault>true</ns27:untaggedDefault>
                                 <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                 <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                 <ns27:vcId>1588617</ns27:vcId>

<ns27:operationalState>DOWN</ns27:operationalState>
                                 <ns27:mtu>1500</ns27:mtu>
                              </ns27:ciscoEfpParameters>
                           </ns9:vendorExtensions>
                        </ns9:transmissionParameters>
                        <ns9:transmissionParameters>
                           <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                        </ns9:transmissionParameters>
                     </ns9:transmissionParametersList>
                  </ns10:tpData>
               </ns8:aEndTpDataList>
               <ns8:zEndTpDataList>
                  <ns10:tpData>
                     <ns10:tpRef>
                        <ns4:rdn>
```

```
                              <ns4:type>MD</ns4:type>
                              <ns4:value>CISCO_EPNM</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>ME</ns4:type>
                              <ns4:value>ASR903-2</ns4:value>
                           </ns4:rdn>
                           <ns4:rdn>
                              <ns4:type>CPTP</ns4:type>
                              <ns4:value>GigabitEthernet0/0/5 EFPID
400</ns4:value>
                           </ns4:rdn>
                        </ns10:tpRef>
                        <ns9:transmissionParametersList>
                           <ns9:transmissionParameters>
                              <ns9:vendorExtensions>
                                 <ns27:ciscoEfpParameters>

<ns27:outerVlanTpId>UNTAGGED</ns27:outerVlanTpId>

<ns27:untaggedDefault>true</ns27:untaggedDefault>
                                    <ns27:rewriteOuterVlanId>-
1</ns27:rewriteOuterVlanId>
                                    <ns27:rewriteinnerVlanId>-
1</ns27:rewriteinnerVlanId>

<ns27:rewriteIsSymmetric>true</ns27:rewriteIsSymmetric>
                                    <ns27:vcId>1588607</ns27:vcId>

<ns27:operationalState>UP</ns27:operationalState>
                                    <ns27:mtu>1500</ns27:mtu>
                                 </ns27:ciscoEfpParameters>
                              </ns9:vendorExtensions>
                           </ns9:transmissionParameters>
                           <ns9:transmissionParameters>
                              <ns9:layerRate
extension="LR_Cisco_CarrierEthernet">VENDOR_EXT</ns9:layerRate>
                           </ns9:transmissionParameters>
                        </ns9:transmissionParametersList>
                     </ns10:tpData>
                  </ns8:zEndTpDataList>
                  <ns8:fdfrType>Unknown</ns8:fdfrType>
               </ns8:fdfr>
            </ns3:fdfrList>
         </ns3:getFlowDomainFragmentsIteratorResponse>
      </soap:Body>
</soap:Envelope>
```

9.29 getAllFlowDomainFragmentNames

9.29.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/mtop/mri/xsd/fdr/ext/fdfrnr/v1"
```

```
    xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
    xmlns:v13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
       <soapenv:Header>
          <v1:header>
            <v1:requestedBatchSize>40</v1:requestedBatchSize>
          </v1:header>
       </soapenv:Header>
       <soapenv:Body>
          <v11:getAllFlowDomainFragmentNamesRequest>

          </v11:getAllFlowDomainFragmentNamesRequest>
       </soapenv:Body>
    </soapenv:Envelope>
```

9.29.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/mri/xsd/fdr/ext/fdfrnr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>40</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=755ad31b-
6b45-47d5-9fcd-7a67198bfae9</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
```

```
      <ns4:getAllFlowDomainFragmentNamesResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/mri/xsd/fdr/ext/fdfrnr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:fdfrNameList>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403484</ns3:value>
                  </ns3:rdn>
               </ns6:name>
               <ns6:discoveredName>EvcLink_Vpls_Bridge_37#37#tree-
del_203208_10.56.23.58#1</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403455</ns3:value>
```

```
                  </ns3:rdn>
               </ns6:name>
               <ns6:discoveredName>EvcLink_EVPL_LS_690#7</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403637</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Vpls_Bridge_721#721#EVPLAN_721_203204_10.56.23.47
#2</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403877</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Bridge_306#306</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403876</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Bridge_300#300</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403879</ns3:value>
```

```
                </ns3:rdn>
             </ns6:name>

<ns6:discoveredName>EvcLink_Bridge_299#299</ns6:discoveredName>
          </ns7:fdfrName>
          <ns7:fdfrName>
             <ns6:name>
                <ns3:rdn>
                   <ns3:type>MD</ns3:type>
                   <ns3:value>CISCO_EPNM</ns3:value>
                </ns3:rdn>
                <ns3:rdn>
                   <ns3:type>FDFR</ns3:type>
                   <ns3:value>403878</ns3:value>
                </ns3:rdn>
             </ns6:name>
             <ns6:discoveredName>EvcLink_Bridge_10#10</ns6:discoveredName>
          </ns7:fdfrName>
          <ns7:fdfrName>
             <ns6:name>
                <ns3:rdn>
                   <ns3:type>MD</ns3:type>
                   <ns3:value>CISCO_EPNM</ns3:value>
                </ns3:rdn>
                <ns3:rdn>
                   <ns3:type>FDFR</ns3:type>
                   <ns3:value>403487</ns3:value>
                </ns3:rdn>
             </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_21.21.21.21_475_3.3.3.3</ns6:discov
eredName>
          </ns7:fdfrName>
          <ns7:fdfrName>
             <ns6:name>
                <ns3:rdn>
                   <ns3:type>MD</ns3:type>
                   <ns3:value>CISCO_EPNM</ns3:value>
                </ns3:rdn>
                <ns3:rdn>
                   <ns3:type>FDFR</ns3:type>
                   <ns3:value>403494</ns3:value>
                </ns3:rdn>
             </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_21.21.21.21_482_3.3.3.3</ns6:discov
eredName>
          </ns7:fdfrName>
          <ns7:fdfrName>
             <ns6:name>
                <ns3:rdn>
                   <ns3:type>MD</ns3:type>
                   <ns3:value>CISCO_EPNM</ns3:value>
                </ns3:rdn>
                <ns3:rdn>
                   <ns3:type>FDFR</ns3:type>
```

```
                        <ns3:value>403492</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_21.21.21.21_287_3.3.3.3</ns6:discov
eredName>
               </ns7:fdfrName>
               <ns7:fdfrName>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FDFR</ns3:type>
                        <ns3:value>403493</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_21.21.21.21_476_3.3.3.3</ns6:discov
eredName>
               </ns7:fdfrName>
               <ns7:fdfrName>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>FDFR</ns3:type>
                        <ns3:value>403491</ns3:value>
                     </ns3:rdn>
                  </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_21.21.21.21_477_3.3.3.3</ns6:discov
eredName>
               </ns7:fdfrName>
               <ns7:fdfrName>
                  <ns6:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
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                     <ns3:rdn>
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overedName>
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```

```
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                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403486</ns3:value>
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2_203208_10.56.23.58#1</ns6:discoveredName>
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            <ns7:fdfrName>
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1</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
```

```
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                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007447</ns3:value>
                  </ns3:rdn>
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            <ns7:fdfrName>
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2</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
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```

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                     <ns3:value>1007467</ns3:value>
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               <ns6:discoveredName>EVCLink GigabitEthernet0/3 EFPID
2</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
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            </ns7:fdfrName>
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                     <ns3:type>FDFR</ns3:type>
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            </ns7:fdfrName>
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                  </ns3:rdn>
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2</ns6:discoveredName>
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                  </ns3:rdn>
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                     <ns3:value>1007494</ns3:value>
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            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
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                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
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                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007499</ns3:value>
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<ns6:discoveredName>OVC_Link_VC_1010078_OVC_Link</ns6:discoveredName>
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```

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4</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
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                  </ns3:rdn>
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1310316_172.23.222.217</ns6:discoveredName>
            </ns7:fdfrName>
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<ns6:discoveredName>EvcLink_Bridge_400#400</ns6:discoveredName>
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                     <ns3:value>1007537</ns3:value>
                  </ns3:rdn>
               </ns6:name>
               <ns6:discoveredName>EvcLink_EFDF_GigabitEthernet0/0/4 EFPID
199 1583585_172.23.222.189</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
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```

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            </ns7:fdfrName>
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                  </ns3:rdn>
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                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1645656</ns3:value>
                  </ns3:rdn>
               </ns6:name>
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            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
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                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1645674</ns3:value>
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<ns6:discoveredName>EvcLink_evpl_gki_0607#99</ns6:discoveredName>
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            <ns7:fdfrName>
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```

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                  </ns3:rdn>
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                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1645671</ns3:value>
                  </ns3:rdn>
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<ns6:discoveredName>EvcLink_Bridge_400#400</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
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                  </ns3:rdn>
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                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1645764</ns3:value>
                  </ns3:rdn>
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<ns6:discoveredName>EvcLink_Infrastructure#ICCP_SM_EVPL</ns6:discoveredName>
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            <ns7:fdfrName>
               <ns6:name>
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                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>404165</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Vpls_Bridge_743#743#EVPLAN_743_203208_10.56.23.58
#2</ns6:discoveredName>
            </ns7:fdfrName>
         </ns4:fdfrNameList>
      </ns4:getAllFlowDomainFragmentNamesResponse>
   </soap:Body>
      </soap:Envelope>
```

9.30 getFlowDomainFragmentNamesIterator

9.30.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/mri/xsd/fdr/ext/fdfrnr/v1">
   <soapenv:Header>
      <v1:header>
         <!--Optional:-->
```

```
         <v1:iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=755ad31b-
6b45-47d5-9fcd-7a67198bfae9</v1:iteratorReferenceURI>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getFlowDomainFragmentNamesIteratorRequest/>
   </soapenv:Body>
    </soapenv:Envelope>
```

9.30.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/mri/xsd/fdr/ext/fdfrnr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>40</requestedBatchSize>
         <batchSequenceNumber>2</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=755ad31b-
6b45-47d5-9fcd-7a67198bfae9</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getFlowDomainFragmentNamesIteratorResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/mri/xsd/fdr/ext/fdfrnr/v1"
```

```
xmlns:ns5="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/mfd/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/fd/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:fdfrNameList>
            <ns7:fdfrName>
               <ns6:name>
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                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1646131</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Bridge_555#555</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
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                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
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                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Bridge_401#401</ns6:discoveredName>
            </ns7:fdfrName>
```

```
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007536</ns3:value>
                  </ns3:rdn>
               </ns6:name>
               <ns6:discoveredName>EvcLink_EFDF_GigabitEthernet0/0/4 EFPID
106 1583585_172.23.222.189</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1646169</ns3:value>
                  </ns3:rdn>
               </ns6:name>
               <ns6:discoveredName>EvcLink_Vpls_Provisioned#EPLAN_multiuni-B-
I21-2#EPLAN_multiuni-B-I21-2_1583583_172.23.222.251#2</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007127</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_100.100.100.8_39_100.100.100.9</ns6
:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007137</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_100.100.100.8_5_100.100.100.9</ns6:
```

```
discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007134</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_100.100.100.8_9_100.100.100.9</ns6:
discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007135</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_100.100.100.8_18_100.100.100.9</ns6
:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1007133</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_EthPwLink#EPW_100.100.100.8_36_100.100.100.9</ns6
:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>1646190</ns3:value>
```

```
                  </ns3:rdn>
               </ns6:name>
               <ns6:discoveredName>EvcLink_Vpls_Provisioned#EVPLAN_multiuni-
B-I21-x#EVPLAN_multiuni-B-I21-x_1310312_172.23.222.249#2</ns6:discoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>2968055</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Vpls_Bridge_15#15#i21_203218_10.56.23.63#1</ns6:d
iscoveredName>
            </ns7:fdfrName>
            <ns7:fdfrName>
               <ns6:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>FDFR</ns3:type>
                     <ns3:value>403956</ns3:value>
                  </ns3:rdn>
               </ns6:name>

<ns6:discoveredName>EvcLink_Vpls_Bridge_48#48#Test_ELAN_Test2_203208_10.56.23
.58#2</ns6:discoveredName>
            </ns7:fdfrName>
         </ns4:fdfrNameList>
      </ns4:getFlowDomainFragmentNamesIteratorResponse>
   </soap:Body>
    </soap:Envelope>
```

9.31 getAllOpticalLinkInterfaces

9.31.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
        <v1:requestedBatchSize>1</v1:requestedBatchSize>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
```

```
      <v11:getAllOpticalLinkInterfacesRequest>

      </v11:getAllOpticalLinkInterfacesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.31.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>1</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>false</batchSequenceEndOfReply>
         <iteratorReferenceURI>cisco://epn.cisco.com?IteratorId=bad66272-
d825-4cef-900c-df9a37aa1987</iteratorReferenceURI>
      </header>
   </soap:Header>
   <soap:Body>
      <ns5:getAllOpticalLinkInterfacesResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1">
     <ns5:opticalLinkInterfaceList>
        <ns5:opticalLinkInterface>
           <ns4:name>
              <ns3:rdn>
                 <ns3:type>MD</ns3:type>
                 <ns3:value>CISCO_EPNM</ns3:value>
              </ns3:rdn>
              <ns3:rdn>
                 <ns3:type>OPTICAL_LINK_INTERFACE</ns3:type>
                 <ns3:value>681681</ns3:value>
              </ns3:rdn>
           </ns4:name>
           <ns4:discoveredName>nmtg-scapa-123</ns4:discoveredName>
        </ns5:opticalLinkInterface>
        <ns5:opticalLinkInterface>
           <ns4:name>
              <ns3:rdn>
                 <ns3:type>MD</ns3:type>
                 <ns3:value>CISCO_EPNM</ns3:value>
              </ns3:rdn>
              <ns3:rdn>
                 <ns3:type>OPTICAL_LINK_INTERFACE</ns3:type>
                 <ns3:value>902598</ns3:value>
              </ns3:rdn>
           </ns4:name>
```

```
               <ns4:discoveredName>ONS15454-42 - WDMSID
B</ns4:discoveredName>
            </ns5:opticalLinkInterface>
            <ns5:opticalLinkInterface>
               <ns4:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>OPTICAL_LINK_INTERFACE</ns3:type>
                     <ns3:value>902624</ns3:value>
                  </ns3:rdn>
               </ns4:name>
               <ns4:discoveredName>ONS15454-42 - WDMSIDE-
C</ns4:discoveredName>
            </ns5:opticalLinkInterface>

         </ns5:opticalLinkInterfaceList>
          </ns5:getAllOpticalLinkInterfacesResponse>
      </soap:Body>
   </soap:Envelope>
```

9.32 getAllCustomerNames

9.32.1 SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/msi/xsd/cnr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllCustomerNamesRequest>
      </v11:getAllCustomerNamesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.32.2 SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/cnr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
```

```
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllCustomerNamesResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/cnr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1">
         <ns4:customerNameList>
            <ns4:customerName>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CUSTOMER</ns3:type>
                     <ns3:value>504504</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:discoveredName>Infrastructure</ns5:discoveredName>
            </ns4:customerName>
            <ns4:customerName>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CUSTOMER</ns3:type>
                     <ns3:value>504505</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:discoveredName>Verizon Wireless</ns5:discoveredName>
            </ns4:customerName>
            <ns4:customerName>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CUSTOMER</ns3:type>
                     <ns3:value>504506</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:discoveredName>AT n T</ns5:discoveredName>
            </ns4:customerName>
         </ns4:customerNameList>
      </ns4:getAllCustomerNamesResponse>
   </soap:Body>
```

```
</soap:Envelope>
```

9.33 getAllQosProfileNames

9.33.1 SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/msi/xsd/qpnr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllQosProfileNamesRequest>
      </v11:getAllQosProfileNamesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.33.2 SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/qpnr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllQosProfileNamesResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/qpnr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns4:QosProfileNameList>
            <ns4:qosProfileName>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
```

```
                     <ns3:type>QOS_PROFILE</ns3:type>
                     <ns3:value>2068066</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:discoveredName>MyUniProfile1</ns5:discoveredName>
            </ns4:qosProfileName>
            <ns4:qosProfileName>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>QOS_PROFILE</ns3:type>
                     <ns3:value>2068067</ns3:value>
                  </ns3:rdn>
               </ns5:name>
               <ns5:discoveredName>MyServiceProfile1</ns5:discoveredName>
            </ns4:qosProfileName>
         </ns4:QosProfileNameList>
      </ns4:getAllQosProfileNamesResponse>
   </soap:Body>
</soap:Envelope>
```

9.34 getProtectionProfile

9.34.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getProtectionProfileRequest>
         <!--Optional:-->
         <v11:protectionProfileRef>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>cvg-scapa-227.cisco.com</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>PPF</v12:type>
               <v12:value>test1</v12:value>
            </v12:rdn>
         </v11:protectionProfileRef>
      </v11:getProtectionProfileRequest>
```

```
   </soapenv:Body>
</soapenv:Envelope>
```

9.34.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getProtectionProfileResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1">
         <ns4:protectionProfileList>
            <ns4:ProtectionProfile>
               <ns5:protectionProfileRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
```

```
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PPF</ns3:type>
                     <ns3:value>test1</ns3:value>
                  </ns3:rdn>
               </ns5:protectionProfileRef>
               <ns5:profileName>test1</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_PLUS_R_BIDIR_APS</ns5:protectionType>
               <ns5:protectionMode>NON_REVERTIVE</ns5:protectionMode>
               <ns5:holdOffTimer>330000</ns5:holdOffTimer>
               <ns5:sncConnectionMode>SNC_I</ns5:sncConnectionMode>
            </ns4:ProtectionProfile>
         </ns4:protectionProfileList>
      </ns4:getProtectionProfileResponse>
   </soap:Body>
</soap:Envelope>
```

9.35 getAllProtectionProfiles

9.35.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllProtectionProfilesRequest>
         <!--Optional:-->
         <v11:mdOrMlsnRef>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
         </v11:mdOrMlsnRef>
      </v11:getAllProtectionProfilesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.35.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
```

```
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns7="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllProtectionProfilesResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1">
         <ns4:protectionProfileList>
            <ns4:ProtectionProfile>
               <ns5:protectionProfileRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-224.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PPF</ns3:type>
                     <ns3:value>OnePlusOne</ns3:value>
```

```
                  </ns3:rdn>
               </ns5:protectionProfileRef>
               <ns5:profileName>OnePlusOne</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_BDIR_APS</ns5:protectionType>
               <ns5:protectionMode>REVERTIVE</ns5:protectionMode>
               <ns5:holdOffTimer>300000</ns5:holdOffTimer>
               <ns5:sncConnectionMode>SNC_N</ns5:sncConnectionMode>
            </ns4:ProtectionProfile>
            <ns4:ProtectionProfile>
               <ns5:protectionProfileRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-224.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PPF</ns3:type>
                     <ns3:value>OnePlusOneUni</ns3:value>
                  </ns3:rdn>
               </ns5:protectionProfileRef>
               <ns5:profileName>OnePlusOneUni</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_UNIDIR_APS</ns5:protectionType>
               <ns5:protectionMode>REVERTIVE</ns5:protectionMode>
               <ns5:holdOffTimer>300000</ns5:holdOffTimer>
               <ns5:sncConnectionMode>SNC_N</ns5:sncConnectionMode>
            </ns4:ProtectionProfile>
            <ns4:ProtectionProfile>
               <ns5:protectionProfileRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PPF</ns3:type>
                     <ns3:value>OnePlusOne</ns3:value>
                  </ns3:rdn>
               </ns5:protectionProfileRef>
               <ns5:profileName>OnePlusOne</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_BDIR_APS</ns5:protectionType>
               <ns5:protectionMode>REVERTIVE</ns5:protectionMode>
               <ns5:holdOffTimer>300000</ns5:holdOffTimer>
               <ns5:sncConnectionMode>SNC_N</ns5:sncConnectionMode>
            </ns4:ProtectionProfile>
            <ns4:ProtectionProfile>
               <ns5:protectionProfileRef>
                  <ns3:rdn>
```

```
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PPF</ns3:type>
                     <ns3:value>OnePlusOneUni</ns3:value>
                  </ns3:rdn>
               </ns5:protectionProfileRef>
               <ns5:profileName>OnePlusOneUni</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_UNIDIR_APS</ns5:protectionType>
               <ns5:protectionMode>REVERTIVE</ns5:protectionMode>
               <ns5:holdOffTimer>300000</ns5:holdOffTimer>
               <ns5:sncConnectionMode>SNC_N</ns5:sncConnectionMode>
            </ns4:ProtectionProfile>
            <ns4:ProtectionProfile>
               <ns5:protectionProfileRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PPF</ns3:type>
                     <ns3:value>test1</ns3:value>
                  </ns3:rdn>
               </ns5:protectionProfileRef>
               <ns5:profileName>test1</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_PLUS_R_BIDIR_APS</ns5:protectionType>
               <ns5:protectionMode>NON_REVERTIVE</ns5:protectionMode>
               <ns5:holdOffTimer>330000</ns5:holdOffTimer>
               <ns5:sncConnectionMode>SNC_I</ns5:sncConnectionMode>
            </ns4:ProtectionProfile>
            <ns4:ProtectionProfile>
               <ns5:protectionProfileRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PPF</ns3:type>
                     <ns3:value>test2</ns3:value>
                  </ns3:rdn>
               </ns5:protectionProfileRef>
```

```
                <ns5:profileName>test2</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_UNIDIR_NO_APS</ns5:protectionType>
                <ns5:protectionMode>REVERTIVE</ns5:protectionMode>
                <ns5:holdOffTimer>330000</ns5:holdOffTimer>
                <ns5:sncConnectionMode>SNC_N</ns5:sncConnectionMode>
            </ns4:ProtectionProfile>
         </ns4:protectionProfileList>
      </ns4:getAllProtectionProfilesResponse>
   </soap:Body>
</soap:Envelope>
```

9.36 createProtectionProfile

9.36.1 SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
   <soapenv:Header>

      <v1:header>
       </v1:header>

   </soapenv:Header>
   <soapenv:Body>
      <v11:createProtectionProfileRequest>
         <!--Optional:-->
         <v11:meRef>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
           <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>cvg-scapa-227.cisco.com</v12:value>
            </v12:rdn>

         </v11:meRef>
         <!--Optional:-->
         <v11:protectionProfileData>
            <!--Optional:-->
            <v13:protectionProfileRef>
               <!--1 or more repetitions:-->
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
                <v12:rdn>
                  <v12:type>ME</v12:type>
                  <v12:value>cvg-scapa-227.cisco.com</v12:value>
               </v12:rdn>
```

```
                <v12:rdn>
                     <v12:type>PPF</v12:type>
                     <v12:value>PPF_Sep28_227</v12:value>
                  </v12:rdn>
               </v13:protectionProfileRef>
               <!--Optional:-->
               <v13:profileName>PPF_Sep28_227</v13:profileName>
               <!--Optional:-->

   <v13:protectionType>ONE_PLUS_ONE_PLUS_R_BIDIR_APS</v13:protectionType>
               <!--Optional:-->
               <v13:protectionMode>NON_REVERTIVE</v13:protectionMode>
               <!--Optional:-->
               <v13:holdOffTimer>100</v13:holdOffTimer>
               <!--Optional:-->
               <v13:waitToRestoreTimer>300</v13:waitToRestoreTimer>
               <!--Optional:-->
               <v13:sncConnectionMode>SNC_N</v13:sncConnectionMode>
            </v11:protectionProfileData>
         </v11:createProtectionProfileRequest>
      </soapenv:Body>
   </soapenv:Envelope>
```

9.36.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:createProtectionProfileResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
```

```
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1">
         <ns4:protectionProfileRef>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>ME</ns3:type>
               <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>PPF</ns3:type>
               <ns3:value>PPF_Sep28_227</ns3:value>
            </ns3:rdn>
         </ns4:protectionProfileRef>
         <ns4:protectionProfileData>
            <ns5:protectionProfileRef>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>PPF</ns3:type>
                  <ns3:value>PPF_Sep28_227</ns3:value>
               </ns3:rdn>
            </ns5:protectionProfileRef>
            <ns5:profileName>PPF_Sep28_227</ns5:profileName>

<ns5:protectionType>ONE_PLUS_ONE_PLUS_R_BIDIR_APS</ns5:protectionType>
            <ns5:protectionMode>NON_REVERTIVE</ns5:protectionMode>
            <ns5:holdOffTimer>100</ns5:holdOffTimer>
            <ns5:waitToRestoreTimer>300</ns5:waitToRestoreTimer>
         </ns4:protectionProfileData>
      </ns4:createProtectionProfileResponse>
   </soap:Body>
</soap:Envelope>
```

9.37 modifyProtectionProfile

9.37.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
```

```
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:modifyProtectionProfileRequest>
         <!--Optional:-->
         <v11:protectionProfileRef>
            <!--1 or more repetitions:-->
                <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
                <v12:rdn>
                  <v12:type>ME</v12:type>
                  <v12:value>cvg-scapa-227.cisco.com</v12:value>
               </v12:rdn>
                 <v12:rdn>
                  <v12:type>PPF</v12:type>
                  <v12:value>PPF_Sep28_227</v12:value>
               </v12:rdn>
               </v11:protectionProfileRef>
         <!--Optional:-->
         <v11:protectionProfileData>
            <!--Optional:-->
            <v13:protectionProfileRef>
               <!--1 or more repetitions:-->
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
                <v12:rdn>
                  <v12:type>ME</v12:type>
                  <v12:value>cvg-scapa-227.cisco.com</v12:value>
               </v12:rdn>
                 <v12:rdn>
                  <v12:type>PPF</v12:type>
                  <v12:value>PPF_Sep28_227</v12:value>
               </v12:rdn>

               </v13:protectionProfileRef>
            <!--Optional:-->
            <v13:profileName>PPF_Sep28_227</v13:profileName>
            <!--Optional:-->
            <v13:protectionType>ONE_PLUS_ONE_BDIR_APS</v13:protectionType>
            <!--Optional:-->
            <v13:protectionMode>REVERTIVE</v13:protectionMode>
            <!--Optional:-->
            <v13:holdOffTimer>200</v13:holdOffTimer>
            <!--Optional:-->
            <v13:waitToRestoreTimer>360</v13:waitToRestoreTimer>
            <!--Optional:-->
            <v13:sncConnectionMode>SNC_I</v13:sncConnectionMode>
```

```
         </v11:protectionProfileData>
      </v11:modifyProtectionProfileRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.37.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:modifyProtectionProfileResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1">
         <ns4:protectionProfileRef>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>ME</ns3:type>
               <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
            </ns3:rdn>
```

```
            <ns3:rdn>
               <ns3:type>PPF</ns3:type>
               <ns3:value>PPF_Sep28_227</ns3:value>
            </ns3:rdn>
         </ns4:protectionProfileRef>
         <ns4:protectionProfileData>
            <ns5:protectionProfileRef>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-scapa-227.cisco.com</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>PPF</ns3:type>
                  <ns3:value>PPF_Sep28_227</ns3:value>
               </ns3:rdn>
            </ns5:protectionProfileRef>
            <ns5:profileName>PPF_Sep28_227</ns5:profileName>
            <ns5:protectionType>ONE_PLUS_ONE_BDIR_APS</ns5:protectionType>
            <ns5:protectionMode>REVERTIVE</ns5:protectionMode>
            <ns5:holdOffTimer>200</ns5:holdOffTimer>
            <ns5:waitToRestoreTimer>360</ns5:waitToRestoreTimer>
         </ns4:protectionProfileData>
      </ns4:modifyProtectionProfileResponse>
   </soap:Body>
</soap:Envelope>
```

9.38 deleteProtectionProfile

9.38.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
       </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:deleteProtectionProfileRequest>
         <!--Optional:-->
         <v11:protectionProfileRef>
            <!--1 or more repetitions:-->
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
                <v12:rdn>
                  <v12:type>ME</v12:type>
                  <v12:value>cvg-frodo-234.cisco.com</v12:value>
               </v12:rdn>
                 <v12:rdn>
```

```
                  <v12:type>PPF</v12:type>
                  <v12:value>ttttt</v12:value>
               </v12:rdn>
         </v11:protectionProfileRef>
      </v11:deleteProtectionProfileRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.38.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:deleteProtectionProfileResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/protectpc/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1">
         <ns4:protectionProfileRef>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
```

```
                <ns3:type>ME</ns3:type>
                <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
             </ns3:rdn>
             <ns3:rdn>
                <ns3:type>PPF</ns3:type>
                <ns3:value>ttttt</ns3:value>
             </ns3:rdn>
          </ns4:protectionProfileRef>
          <ns4:protectionProfileData>
             <ns5:profileName>ttttt</ns5:profileName>
             <ns5:protectionType>ONE_PLUS_ONE_BDIR_APS</ns5:protectionType>
             <ns5:protectionMode>NON_REVERTIVE</ns5:protectionMode>
             <ns5:holdOffTimer>0</ns5:holdOffTimer>
             <ns5:waitToRestoreTimer>300000</ns5:waitToRestoreTimer>
          </ns4:protectionProfileData>
       </ns4:deleteProtectionProfileResponse>
    </soap:Body>
</soap:Envelope>
```

9.39 getMPLSTEExplicitPath

9.39.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/msi/xsd/mtepr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getMPLSTEExplicitPathRequest>
         <!--Optional:-->
         <v11:explicitPathRef>
            <!--1 or more repetitions:-->
               <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>ME</v12:type>
                     <v12:value>cvg-frodo-234.cisco.com</v12:value>
                  </v12:rdn>
             <v12:rdn>
               <v12:type>TEPATH</v12:type>
               <v12:value>TEST-PATH-VE-92</v12:value>
            </v12:rdn>
         </v11:explicitPathRef>
      </v11:getMPLSTEExplicitPathRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.39.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
```

```
   <soap:Header>
      <header
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns12="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/mtepr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:getMPLSTEExplicitPathResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/mtepr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns12="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
         <ns4:mplsTEExplicitPathList>
            <ns4:mplsTEExplicitPath>
               <ns15:pathRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TEPATH</ns3:type>
```

```
                     <ns3:value>TEST-PATH-VE-92</ns3:value>
                  </ns3:rdn>
               </ns15:pathRef>
               <ns15:pathEntries>
                  <ns15:id>1</ns15:id>
                  <ns15:constraintType>STRICT</ns15:constraintType>

<ns15:entryConstraintType>NEXT_ADDRESS</ns15:entryConstraintType>
                  <ns15:meRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>454E-234-72</ns3:value>
                     </ns3:rdn>
                  </ns15:meRef>
                  <ns15:tpRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>454E-234-72</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=LINE-2-1-2-RX&amp;amp;LINE-2-1-2-
TX;LR=LR_Optical_Transmission_Section</ns3:value>
                     </ns3:rdn>
                  </ns15:tpRef>
               </ns15:pathEntries>
               <ns15:pathEntries>
                  <ns15:id>2</ns15:id>
                  <ns15:constraintType>STRICT</ns15:constraintType>

<ns15:entryConstraintType>NEXT_ADDRESS</ns15:entryConstraintType>
                  <ns15:meRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-127</ns3:value>
                     </ns3:rdn>
                  </ns15:meRef>
                  <ns15:tpRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
```

```
                        <ns3:value>NCS2KA-236-127</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=PCHAN-4-6-RX&amp;amp;PCHAN-4-6-
TX;LR=LR_OPTICAL_SECTION</ns3:value>
                     </ns3:rdn>
                  </ns15:tpRef>
               </ns15:pathEntries>
            </ns4:mplsTEExplicitPath>
         </ns4:mplsTEExplicitPathList>
      </ns4:getMPLSTEExplicitPathResponse>
   </soap:Body>
</soap:Envelope>
```

9.40 getAllMPLSTEExplicitPaths

9.40.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/msi/xsd/mtepr/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getAllMPLSTEExplicitPathsRequest>
        <v11:mdOrMlsnRef>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>

         </v11:mdOrMlsnRef>
         </v11:getAllMPLSTEExplicitPathsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.40.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns12="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
```

```
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/mtepr/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns4:getAllMPLSTEExplicitPathsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/msi/xsd/mtepr/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns12="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns15="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
         <ns4:mplsTEExplicitPathList>
            <ns4:mplsTEExplicitPath>
               <ns15:pathRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TEPATH</ns3:type>
                     <ns3:value>TEST-PATH-VE-82</ns3:value>
                  </ns3:rdn>
               </ns15:pathRef>
               <ns15:pathEntries>
                  <ns15:id>1</ns15:id>
                  <ns15:constraintType>STRICT</ns15:constraintType>

<ns15:entryConstraintType>NEXT_ADDRESS</ns15:entryConstraintType>
```

```
                  <ns15:meRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>454E-234-72</ns3:value>
                     </ns3:rdn>
                  </ns15:meRef>
                  <ns15:tpRef>
                     <ns3:rdn>
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                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>454E-234-72</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=LINE-2-1-2-RX&amp;amp;LINE-2-1-2-
TX;LR=LR_Optical_Transmission_Section</ns3:value>
                     </ns3:rdn>
                  </ns15:tpRef>
               </ns15:pathEntries>
               <ns15:pathEntries>
                  <ns15:id>2</ns15:id>
                  <ns15:constraintType>STRICT</ns15:constraintType>

<ns15:entryConstraintType>NEXT_ADDRESS</ns15:entryConstraintType>
                  <ns15:meRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-127</ns3:value>
                     </ns3:rdn>
                  </ns15:meRef>
                  <ns15:tpRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
```

```
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>ME</ns3:type>
                        <ns3:value>NCS2KA-236-127</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CTP</ns3:type>
                        <ns3:value>name=PCHAN-4-6-RX&amp;amp;PCHAN-4-6-
TX;LR=LR_OPTICAL_SECTION</ns3:value>
                     </ns3:rdn>
                  </ns15:tpRef>
               </ns15:pathEntries>
            </ns4:mplsTEExplicitPath>
            <ns4:mplsTEExplicitPath>
               <ns15:pathRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>cvg-scapa-221.cisco.com</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>TEPATH</ns3:type>
                     <ns3:value/>
                  </ns3:rdn>
               </ns15:pathRef>
            </ns4:mplsTEExplicitPath>
         </ns4:mplsTEExplicitPathList>
      </ns4:getAllMPLSTEExplicitPathsResponse>
   </soap:Body>
</soap:Envelope>
```

9.41 createMPLSTEExplicitPath

9.41.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1">
   <soapenv:Header>
      <v1:header>
</v1:header>
         <!--Optional:-->
   </soapenv:Header>
   <soapenv:Body>
     <v11:createMPLSTEExplicitPathRequest>
         <!--Optional:-->

         <!--Optional:-->
         <v11:explicitPathData>
            <!--Optional:-->
```

```
            <v13:pathRef>
                 <v12:rdn>
                      <v12:type>MD</v12:type>
                      <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                       <v12:type>ME</v12:type>
                       <v12:value>cvg-scapa-222.cisco.com</v12:value>
                    </v12:rdn>
              <v12:rdn>
                <v12:type>TEPATH</v12:type>
                <v12:value>TEST-PATH-SANITY-I24B-1</v12:value>
             </v12:rdn>
             </v13:pathRef>
             <!--Zero or more repetitions:-->
             <v13:pathEntries>
                <v13:id>1</v13:id>
                <v13:constraintType>STRICT</v13:constraintType>

<v13:entryConstraintType>EXCLUDE_ADDRESS</v13:entryConstraintType>
                <v13:meRef>
                   <!--1 or more repetitions:-->
                   <v12:rdn>
                      <v12:type>MD</v12:type>
                      <v12:value>CISCO_EPNM</v12:value>
                   </v12:rdn>
                   <v12:rdn>
                      <v12:type>ME</v12:type>
                      <v12:value>cvg-scapa-222.cisco.com</v12:value>
                   </v12:rdn>

                </v13:meRef>
                <v13:tpRef>
                  <v12:rdn>
                      <v12:type>MD</v12:type>
                      <v12:value>CISCO_EPNM</v12:value>
                   </v12:rdn>
                   <v12:rdn>
                      <v12:type>ME</v12:type>
                      <v12:value>cvg-scapa-222.cisco.com</v12:value>
                   </v12:rdn>
                   <v12:rdn>
                      <v12:type>PTP</v12:type>

<v12:value>name=Optics0/2/0/22;LR=LR_PHYSICAL_OPTICAL</v12:value>
                   </v12:rdn>
                  </v13:tpRef>
             </v13:pathEntries>
          </v11:explicitPathData>

      </v11:createMPLSTEExplicitPathRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.41.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:createMPLSTEExplicitPathResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns19="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1">
         <ns4:explicitPathRef>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>ME</ns3:type>
               <ns3:value>cvg-scapa-222.cisco.com</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>TEPATH</ns3:type>
```

```
                <ns3:value>TEST-PATH-SANITY-I24B-1</ns3:value>
             </ns3:rdn>
          </ns4:explicitPathRef>
          <ns4:explicitPathData>
             <ns5:pathRef>
                <ns3:rdn>
                   <ns3:type>MD</ns3:type>
                   <ns3:value>CISCO_EPNM</ns3:value>
                </ns3:rdn>
                <ns3:rdn>
                   <ns3:type>ME</ns3:type>
                   <ns3:value>cvg-scapa-222.cisco.com</ns3:value>
                </ns3:rdn>
                <ns3:rdn>
                   <ns3:type>TEPATH</ns3:type>
                   <ns3:value>TEST-PATH-SANITY-I24B-1</ns3:value>
                </ns3:rdn>
             </ns5:pathRef>
             <ns5:pathEntries>
                <ns5:id>1</ns5:id>
                <ns5:constraintType>STRICT</ns5:constraintType>

<ns5:entryConstraintType>EXCLUDE_ADDRESS</ns5:entryConstraintType>
                <ns5:meRef>
                   <ns3:rdn>
                      <ns3:type>MD</ns3:type>
                      <ns3:value>CISCO_EPNM</ns3:value>
                   </ns3:rdn>
                   <ns3:rdn>
                      <ns3:type>ME</ns3:type>
                      <ns3:value>cvg-scapa-222.cisco.com</ns3:value>
                   </ns3:rdn>
                </ns5:meRef>
                <ns5:tpRef>
                   <ns3:rdn>
                      <ns3:type>MD</ns3:type>
                      <ns3:value>CISCO_EPNM</ns3:value>
                   </ns3:rdn>
                   <ns3:rdn>
                      <ns3:type>ME</ns3:type>
                      <ns3:value>cvg-scapa-222.cisco.com</ns3:value>
                   </ns3:rdn>
                   <ns3:rdn>
                      <ns3:type>CTP</ns3:type>

<ns3:value>name=Optics0/2/0/22;LR=LR_PHYSICAL_OPTICAL</ns3:value>
                   </ns3:rdn>
                </ns5:tpRef>
             </ns5:pathEntries>
          </ns4:explicitPathData>
       </ns4:createMPLSTEExplicitPathResponse>
    </soap:Body>
</soap:Envelope>
```

9.42 modifyMPLSTEExplicitPath

9.42.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1">
   <soapenv:Header>
      <v1:header>
</v1:header>
         <!--Optional:-->
   </soapenv:Header>
   <soapenv:Body>
      <v11:modifyMPLSTEExplicitPathRequest>
         <!--Optional:-->
         <v11:explicitPathData>
            <!--Optional:-->
           <v13:pathRef>
                <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>ME</v12:type>
                     <v12:value>cvg-frodo-234.cisco.com</v12:value>
                  </v12:rdn>
              <v12:rdn>
                <v12:type>TEPATH</v12:type>
                <v12:value>TEST-PATH-VE-93</v12:value>
             </v12:rdn>
             </v13:pathRef>
             <!--Zero or more repetitions:-->

         </v11:explicitPathData>

      </v11:modifyMPLSTEExplicitPathRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.42.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
```

```
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:modifyMPLSTEEExplicitPathResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/route/v1">
         <ns4:explicitPathRef>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>ME</ns3:type>
               <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>TEPATH</ns3:type>
               <ns3:value>TEST-PATH-VE-93</ns3:value>
            </ns3:rdn>
         </ns4:explicitPathRef>
         <ns4:explicitPathData>
            <ns5:pathRef>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>TEPATH</ns3:type>
                  <ns3:value>TEST-PATH-VE-93</ns3:value>
```

```
            </ns3:rdn>
         </ns5:pathRef>
      </ns4:explicitPathData>
   </ns4:modifyMPLSTEEExplicitPathResponse>
</soap:Body>
</soap:Envelope>
```

9.43 deleteMPLSTEExplicitPath

9.43.1 SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:deleteMPLSTEExplicitPathRequest>
         <!--Optional:-->
         <v11:explicitPathRef>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
           <v12:rdn>
               <v12:type>ME</v12:type>
               <v12:value>cvg-frodo-234.cisco.com</v12:value>
            </v12:rdn>
           <v12:rdn>
               <v12:type>TEPATH</v12:type>
               <v12:value>TEST-PATH-VE-89</v12:value>
            </v12:rdn>
         </v11:explicitPathRef>
      </v11:deleteMPLSTEExplicitPathRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.43.2 SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
```

```
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:deleteMPLSTEExplicitPathResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.cisco.com/epnm/mtop/rp/xsd/mtepc/v1"
xmlns:ns5="http://www.cisco.com/epnm/mtop/nrf/xsd/mtep/ext/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns8="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/route/v1">
         <ns4:explicitPathRef>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>ME</ns3:type>
               <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>TEPATH</ns3:type>
               <ns3:value>TEST-PATH-VE-89</ns3:value>
            </ns3:rdn>
         </ns4:explicitPathRef>
         <ns4:explicitPathData>
            <ns5:pathRef>
               <ns3:rdn>
                  <ns3:type>MD</ns3:type>
                  <ns3:value>CISCO_EPNM</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>ME</ns3:type>
                  <ns3:value>cvg-frodo-234.cisco.com</ns3:value>
               </ns3:rdn>
               <ns3:rdn>
                  <ns3:type>TEPATH</ns3:type>
```

```
                  <ns3:value>TEST-PATH-VE-89</ns3:value>
               </ns3:rdn>
            </ns5:pathRef>
            <ns5:pathEntries>
               <ns5:id>1</ns5:id>
               <ns5:constraintType>STRICT</ns5:constraintType>

<ns5:entryConstraintType>NEXT_ADDRESS</ns5:entryConstraintType>
               <ns5:meRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>454E-234-72</ns3:value>
                  </ns3:rdn>
               </ns5:meRef>
               <ns5:tpRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>454E-234-72</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CTP</ns3:type>
                     <ns3:value>name=LINE-2-1-2-RX&amp;amp;LINE-2-1-2-
TX;LR=LR_Optical_Transmission_Section</ns3:value>
                  </ns3:rdn>
               </ns5:tpRef>
            </ns5:pathEntries>
         </ns4:explicitPathData>
      </ns4:deleteMPLSTEExplicitPathResponse>
   </soap:Body>
</soap:Envelope>
```

9.44 getServiceInventory for CFS Data

9.44.1 CE Service SOAP Request

Various request can be made based on serviceType, Granularity and CFS RDN. The possible requests of getServiceInventory for CFS Data are:

ServiceObjectType	ServiceType	Granularity	CFS RDN	Description
CFS	EPL, EVPL, EP-LAN, EVP-LAN, EP-Tree, EVP-Tree, Access EPL, Access EVPL, EVC	NAME/FULL	0	Give all CFS name/full object instances.
CFS	EPL, EVPL, EP-LAN, EVP-LAN, EP-Tree, EVP-Tree, Access EPL, Access EVPL, EVC	NAME/FULL	1	Give CFS full object instances for a CFS_ID.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">

   <soapenv:Header>
      <v1:header>
       <v1:requestedBatchSize>1</v1:requestedBatchSize>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getServiceInventoryRequest>
         <!--Optional:-->
         <v11:filter>
            <!--You have a CHOICE of the next 2 items at this level-->
            <v11:scope>
               <!--Zero or more repetitions:-->
              <v11:baseInstance>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>EVPL</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>CFS</v12:type>
                     <v12:value>EVPL X MyServiceI21</v12:value>
                  </v12:rdn>
               </v11:baseInstance>
               <v11:serviceObjectType>CFS</v11:serviceObjectType>
            </v11:scope>
            <v11:selection>FULL</v11:selection>
         </v11:filter>
      </v11:getServiceInventoryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.44.2 CE Service SOAP Response

```
    <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
       <soap:Header>
          <header
    xmlns:ns12="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
    xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
    xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
    xmlns:ns9="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
    xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
    xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
    xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
    xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
    xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
    xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
    xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
    xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
             <requestedBatchSize>1</requestedBatchSize>
```

```
      </header>
   </soap:Header>
   <soap:Body>
      <ns7:getServiceInventoryResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1">
       <ns7:inventoryData>
            <ns7:cfsList>
               <ns7:cfs>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CFS</ns3:type>
                        <ns3:value>EVPL X MyServiceI21</ns3:value>
                     </ns3:rdn>
                  </ns4:name>
                  <ns4:discoveredName>EVPL X
MyServiceI21</ns4:discoveredName>
                  <ns4:vendorExtensions>
                     <ns12:ciscoCeCfsAttributes>
        <ns12:uniCeVlanIdPreservation>true</ns12:uniCeVlanIdPreservation>
       <ns12:uniCeVlanCosPreservation>true</ns12:uniCeVlanCosPreservation>
                        <ns12:mtuSize>1522</ns12:mtuSize>
                        <ns12:serviceType>EVPL</ns12:serviceType>
                        <ns12:serviceCategory>Point-to-
Point</ns12:serviceCategory>
                        <ns12:status>Created</ns12:status>
                        <ns10:rfsRefList>
                           <ns3:name>
                              <ns3:rdn>
                                 <ns3:type>MD</ns3:type>
                                 <ns3:value>CISCO_EPNM</ns3:value>
                              </ns3:rdn>
                              <ns3:rdn>
                                 <ns3:type>FDFR</ns3:type>
                              <ns3:value>EvcLink_EVPL_LS_690#7</ns3:value>
                              </ns3:rdn>
                           </ns3:name>
                        </ns10:rfsRefList>
                        <ns12:unicastServiceFrameDelivery>deliver un-
conditionally</ns12:unicastServiceFrameDelivery>
                        <ns12:multicastServiceFrameDelivery>deliver un-
conditionally</ns12:multicastServiceFrameDelivery>
```

```
                        <ns12:broadcastServiceFrameDelivery>deliver un-
conditionally</ns12:broadcastServiceFrameDelivery>
                     </ns12:ciscoCeCfsAttributes>
                  </ns4:vendorExtensions>
                  <ns6:hasStarted>false</ns6:hasStarted>
                  <ns6:isMandatory>false</ns6:isMandatory>
                  <ns6:startMode>UNKNOWN</ns6:startMode>
                  <ns6:isStateful>true</ns6:isStateful>
                  <ns6:serviceState>RESERVED</ns6:serviceState>
                  <ns6:subscriberRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CUSTOMER</ns3:type>
                        <ns3:value>Infrastructure</ns3:value>
                     </ns3:rdn>
                  </ns6:subscriberRef>
                  <ns6:sapList>
                     <ns4:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                           <ns3:value>cfs=EVPL X
MyServiceI21;sap=1011062</ns3:value>
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns12:ciscoCeSapAttributes>
                           <ns12:portRef>
                              <ns3:rdn>
                                 <ns3:type>MD</ns3:type>
                                 <ns3:value>CISCO_EPNM</ns3:value>
                              </ns3:rdn>
                              <ns3:rdn>
                                 <ns3:type>UNI</ns3:type>
                                 <ns3:value>evpl_x_my-s-uni-a-
2</ns3:value>
                              </ns3:rdn>
                           </ns12:portRef>
                           <ns12:portSpeedRate>10
Mbps</ns12:portSpeedRate>
                           <ns12:portMode>FULL DUPLEX</ns12:portMode>
                        <ns12:bundlingIndicator>true</ns12:bundlingIndicator>
                      <ns12:allToOneIndicator>false</ns12:allToOneIndicator>
                           <ns12:l2ControlProtocolProfile>MEF Option
1</ns12:l2ControlProtocolProfile>
                           <ns12:portMtuSize>8000</ns12:portMtuSize>
            <ns12:portServiceMuxIndicator>true</ns12:portServiceMuxIndicator>
                     <ns12:portMaxNumOfVCs>2147483647</ns12:portMaxNumOfVCs>
                           <ns12:portEnableOAM>true</ns12:portEnableOAM>
          <ns12:portEnableLinkManagement>true</ns12:portEnableLinkManagement>
```

```
                           <ns12:ceVLANIdList>1001</ns12:ceVLANIdList>
                           <ns12:matchUntagged>true</ns12:matchUntagged>
                           <ns12:role>Root</ns12:role>
                           <ns12:ingressBandwidthProfile/>
                           <ns12:egressBandwidthProfile/>
                           <ns12:matchType>default</ns12:matchType>

<ns12:priorityTagged>false</ns12:priorityTagged>
                           <ns12:matchExact>false</ns12:matchExact>
                        </ns12:ciscoCeSapAttributes>
                     </ns4:vendorExtensions>
                     <ns6:operationalState>DISABLED</ns6:operationalState>
                     <ns6:resourceRef>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                     <ns3:value>ASR901-CSG-1-DOMAIN2.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CPTP</ns3:type>
                           <ns3:value>GigabitEthernet0/3 EFPID
1</ns3:value>
                        </ns3:rdn>
                     </ns6:resourceRef>
                  </ns6:sapList>
                  <ns6:sapList>
                     <ns4:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                <ns3:value>cfs=EVPL X MyServiceI21;sap=1011063</ns3:value>
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns12:ciscoCeSapAttributes>
                           <ns12:portRef>
                              <ns3:rdn>
                                 <ns3:type>MD</ns3:type>
                                 <ns3:value>CISCO_EPNM</ns3:value>
                              </ns3:rdn>
                              <ns3:rdn>
                                 <ns3:type>UNI</ns3:type>
                                <ns3:value>evpl_x_my-s-uni-z-2</ns3:value>
                              </ns3:rdn>
                           </ns12:portRef>
                          <ns12:portSpeedRate>10 Mbps</ns12:portSpeedRate>
                           <ns12:portMode>FULL DUPLEX</ns12:portMode>
                     <ns12:bundlingIndicator>true</ns12:bundlingIndicator>
                    <ns12:allToOneIndicator>false</ns12:allToOneIndicator>
```

```
                              <ns12:l2ControlProtocolProfile>MEF Option
1</ns12:l2ControlProtocolProfile>
                              <ns12:portMtuSize>8000</ns12:portMtuSize>
          <ns12:portServiceMuxIndicator>true</ns12:portServiceMuxIndicator>
               <ns12:portMaxNumOfVCs>2147483647</ns12:portMaxNumOfVCs>
                              <ns12:portEnableOAM>true</ns12:portEnableOAM>
<ns12:portEnableLinkManagement>true</ns12:portEnableLinkManagement>
                              <ns12:ceVLANIdList>1002</ns12:ceVLANIdList>
                              <ns12:matchUntagged>true</ns12:matchUntagged>
                              <ns12:role>Root</ns12:role>
                              <ns12:ingressBandwidthProfile/>
                              <ns12:egressBandwidthProfile/>
                              <ns12:matchType>default</ns12:matchType>
                     <ns12:priorityTagged>false</ns12:priorityTagged>
                              <ns12:matchExact>false</ns12:matchExact>
                           </ns12:ciscoCeSapAttributes>
                        </ns4:vendorExtensions>
                        <ns6:operationalState>DISABLED</ns6:operationalState>
                        <ns6:resourceRef>
                           <ns3:rdn>
                              <ns3:type>MD</ns3:type>
                              <ns3:value>CISCO_EPNM</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>ME</ns3:type>
                              <ns3:value>ASR901-CSG-1-
DOMAIN3.cisco.com</ns3:value>
                           </ns3:rdn>
                           <ns3:rdn>
                              <ns3:type>CPTP</ns3:type>
                              <ns3:value>GigabitEthernet0/4 EFPID
1</ns3:value>
                           </ns3:rdn>
                        </ns6:resourceRef>
                     </ns6:sapList>
                  </ns7:cfs>
               </ns7:cfsList>
            </ns7:inventoryData>
         </ns7:getServiceInventoryResponse>
      </soap:Body>
</soap:Envelope>
```

9.44.3 DWDM/OTN Service SOAP Request

Various request can be made based on serviceType, Granularity and CFS RDN. The possible requests of getServiceInventory for CFS Data are:

ServiceObjectType	ServiceType	Granularity	CFS RDN	Description
CFS	OCHCC / OCHNC / OCH-Trail /ODU_TUNNEL / ODU_UNI	NAME/FULL	0	Give all CFS name/ full object instances
CFS	OCHCC / OCHNC / OCH-Trail /ODU_TUNNEL / ODU_UNI	NAME/FULL	1	Give CFS name/ full object instances for a CFS_ID

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getServiceInventoryRequest>
         <v11:filter>
            <!--You have a CHOICE of the next 2 items at this level-->
            <v11:scope>
               <!--Zero or more repetitions:-->
               <v11:baseInstance>
                  <!--1 or more repetitions:-->
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>OCHCC</v12:value>
                  </v12:rdn>
               </v11:baseInstance>
               <v11:serviceObjectType>CFS</v11:serviceObjectType>
            </v11:scope>
            <v11:selection>FULL</v11:selection>
         </v11:filter>
      </v11:getServiceInventoryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.44.4 DWDM/OTN Service SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
     <header xmlns:ns18="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns10="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns7:getServiceInventoryResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns10="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns7:inventoryData>
            <ns7:cfsList>
               <ns7:cfs>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CFS</ns3:type>
                        <ns3:value>ochCC-respin-anand</ns3:value>
                     </ns3:rdn>
                  </ns4:name>
                  <ns4:discoveredName>ochCC-respin-anand</ns4:discoveredName>
                  <ns4:vendorExtensions>
                     <ns13:ciscoOpticalCircuitOchCCExtension>
                        <ns13:circuitId>ochCC-respin-anand</ns13:circuitId>
                        <ns13:createTime>2015-07-24T02:40:39.436-
07:00</ns13:createTime>
                        <ns13:customer>157157</ns13:customer>
                        <ns13:deployed>false</ns13:deployed>
                        <ns13:description>str1234</ns13:description>
                        <ns13:direction>UNIDIRECTIONAL</ns13:direction>
                        <ns13:instanceId>1969-12-31T16:10:49.711-
08:00</ns13:instanceId>
                        <ns13:isMatched>false</ns13:isMatched>
                        <ns13:layerRate>LR_OPTICAL_CHANNEL</ns13:layerRate>
                        <ns13:name>ochCC-respin-anand</ns13:name>
```

```
<ns13:provisioningState>FAILED</ns13:provisioningState>
                        <ns13:sncId>649711</ns13:sncId>
                        <ns13:status>Created</ns13:status>
                        <ns13:type>OCHCC</ns13:type>
                        <ns13:version>1</ns13:version>
                     </ns13:ciscoOpticalCircuitOchCCExtension>
                  </ns4:vendorExtensions>
                  <ns6:hasStarted>false</ns6:hasStarted>
                  <ns6:isMandatory>false</ns6:isMandatory>
                  <ns6:startMode>UNKNOWN</ns6:startMode>
                  <ns6:isStateful>true</ns6:isStateful>
                  <ns6:serviceState>PROVISIONED_INACTIVE</ns6:serviceState>
                  <ns6:subscriberRef>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CUSTOMER</ns3:type>
                        <ns3:value>Infrastructure</ns3:value>
                     </ns3:rdn>
                  </ns6:subscriberRef>
                  <ns6:sapList>
                     <ns4:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                           <ns3:value>cfs=ochCC-respin-
anand;sap=701851</ns3:value>
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns13:ciscoOpticalSapAttributes>
                           <ns13:ipAddress>10.58.229.73</ns13:ipAddress>
                           <ns13:name>VFAC-5-3-1</ns13:name>
                           <ns13:displayName>701851</ns13:displayName>
                           <ns13:instanceId>701851</ns13:instanceId>
                           <ns13:role>SRC</ns13:role>
                           <ns13:protocolEndpoint/>
                        </ns13:ciscoOpticalSapAttributes>
                     </ns4:vendorExtensions>
                  </ns6:sapList>
                  <ns6:sapList>
                     <ns4:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                           <ns3:value>cfs=ochCC-respin-
anand;sap=701852</ns3:value>
```

```
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns13:ciscoOpticalSapAttributes>
                           <ns13:ipAddress>10.58.234.38</ns13:ipAddress>
                           <ns13:name>FAC-1-1-1-1</ns13:name>
                           <ns13:displayName>701852</ns13:displayName>
                           <ns13:instanceId>701852</ns13:instanceId>
                           <ns13:role>DST</ns13:role>
                        </ns13:ciscoOpticalSapAttributes>
                     </ns4:vendorExtensions>
                  </ns6:sapList>
               </ns7:cfs>
               <ns7:cfs>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CFS</ns3:type>
                        <ns3:value>REYA_OCHCC_24-07-Test-01</ns3:value>
                     </ns3:rdn>
                  </ns4:name>
                  <ns4:discoveredName>REYA_OCHCC_24-07-Test-
01</ns4:discoveredName>
                  <ns4:vendorExtensions>
                     <ns13:ciscoOpticalCircuitOchCCExtension>
                        <ns13:circuitId>REYA_OCHCC_24-07-Test-
01</ns13:circuitId>
                        <ns13:createTime>2015-07-24T02:47:05.022-
07:00</ns13:createTime>
                        <ns13:customer>157157</ns13:customer>
                        <ns13:deployed>false</ns13:deployed>
                        <ns13:description>OCHCC-Test</ns13:description>
                        <ns13:direction>BIDIRECTIONAL</ns13:direction>
                        <ns13:instanceId>1969-12-31T16:10:49.715-
08:00</ns13:instanceId>
                        <ns13:isMatched>false</ns13:isMatched>
                        <ns13:layerRate>LR_OPTICAL_CHANNEL</ns13:layerRate>
                        <ns13:name>REYA_OCHCC_24-07-Test-01</ns13:name>

<ns13:provisioningState>DEPLOYING</ns13:provisioningState>
                        <ns13:sncId>649715</ns13:sncId>
                        <ns13:status>Created</ns13:status>
                        <ns13:type>OCHCC</ns13:type>
                        <ns13:version>1</ns13:version>
                     </ns13:ciscoOpticalCircuitOchCCExtension>
                  </ns4:vendorExtensions>
                  <ns6:hasStarted>false</ns6:hasStarted>
                  <ns6:isMandatory>false</ns6:isMandatory>
                  <ns6:startMode>UNKNOWN</ns6:startMode>
                  <ns6:isStateful>true</ns6:isStateful>
                  <ns6:serviceState>PROVISIONED_INACTIVE</ns6:serviceState>
                  <ns6:subscriberRef>
                     <ns3:rdn>
```

```
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>CUSTOMER</ns3:type>
                        <ns3:value>Infrastructure</ns3:value>
                     </ns3:rdn>
                  </ns6:subscriberRef>
                  <ns6:sapList>
                     <ns4:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                           <ns3:value>cfs=REYA_OCHCC_24-07-Test-
01;sap=701861</ns3:value>
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns13:ciscoOpticalSapAttributes>
                           <ns13:ipAddress>10.58.235.159</ns13:ipAddress>
                           <ns13:name>VFAC-5-2-1-1</ns13:name>
                           <ns13:displayName>701861</ns13:displayName>
                           <ns13:instanceId>701861</ns13:instanceId>
                           <ns13:role>SRC</ns13:role>
                           <ns13:protocolEndpoint/>
                        </ns13:ciscoOpticalSapAttributes>
                     </ns4:vendorExtensions>
                  </ns6:sapList>
                  <ns6:sapList>
                     <ns4:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                           <ns3:value>cfs=REYA_OCHCC_24-07-Test-
01;sap=701862</ns3:value>
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns13:ciscoOpticalSapAttributes>
                           <ns13:ipAddress>10.58.235.160</ns13:ipAddress>
                           <ns13:name>FAC-4-2-1-1</ns13:name>
                           <ns13:displayName>701862</ns13:displayName>
                           <ns13:instanceId>701862</ns13:instanceId>
                           <ns13:role>DST</ns13:role>
                           <ns13:protocolEndpoint/>
                        </ns13:ciscoOpticalSapAttributes>
                     </ns4:vendorExtensions>
                  </ns6:sapList>
               </ns7:cfs>
            </ns7:cfsList>
```

```
         </ns7:inventoryData>
      </ns7:getServiceInventoryResponse>
   </soap:Body>
</soap:Envelope>
```

9.45 getServiceInventory for SAP Data

9.45.1 CE Service SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">

   <soapenv:Header>
      <v1:header>
       <v1:requestedBatchSize>1</v1:requestedBatchSize>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getServiceInventoryRequest>
         <!--Optional:-->
         <v11:filter>
            <!--You have a CHOICE of the next 2 items at this level-->
            <v11:scope>
               <!--Zero or more repetitions:-->
              <v11:baseInstance>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>EPL</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SAP</v12:type>
                     <v12:value> cfs=EPL X
MyServiceI21;sap=1011058</v12:value>
                  </v12:rdn>
               </v11:baseInstance>
               <v11:serviceObjectType>SAP</v11:serviceObjectType>
            </v11:scope>
            <v11:selection>FULL</v11:selection>
         </v11:filter>
      </v11:getServiceInventoryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.45.2 CE Service SOAP Response

```
    <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
       <soap:Header>
          <header
    xmlns:ns12="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
```

```
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>1</requestedBatchSize>
      </header>
   </soap:Header>
   <soap:Body>
      <ns7:getServiceInventoryResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1">
       <ns7:inventoryData>
            <ns7:sapList>
               <ns7:sap>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>SAP</ns3:type>
                  <ns3:value>cfs=EPL X MyServiceI21;sap=1011058</ns3:value>
                     </ns3:rdn>
                   </ns4:name>
                     <ns4:vendorExtensions>
                      <ns10:ciscoCeSapAttributes>
                         <ns12:portRef>
                            <ns3:rdn>
                               <ns3:type>MD</ns3:type>
                               <ns3:value>CISCO_EPNM</ns3:value>
                            </ns3:rdn>
                            <ns3:rdn>
                               <ns3:type>UNI</ns3:type>
                               <ns3:value>epl_x_my-s-uni-a-2</ns3:value>
                            </ns3:rdn>
                         </ns12:portRef>
                     <ns10:portSpeedRate>10 Mbps</ns10:portSpeedRate>
                         <ns10:portMode>FULL DUPLEX</ns10:portMode>
                     <ns10:bundlingIndicator>true</ns10:bundlingIndicator>
```

```
                        <ns10:allToOneIndicator>false</ns10:allToOneIndicator>
                            <ns10:portMtuSize>8000</ns10:portMtuSize>
            <ns10:portServiceMuxIndicator>true</ns10:portServiceMuxIndicator>
<ns10:portMaxNumOfVCs>2147483647</ns10:portMaxNumOfVCs>
                            <ns10:portEnableOAM>true</ns10:portEnableOAM>
      <ns10:portEnableLinkManagement>true</ns10:portEnableLinkManagement>
                            <ns10:ceVLANIdList>1001</ns10:ceVLANIdList>
                            <ns10:matchUntagged>true</ns10:matchUntagged>
                            <ns10:role>Root</ns10:role>
                            <ns10:ingressBandwidthProfile/>
                            <ns10:egressBandwidthProfile>
                               <ns10:ciscoBWProfile>
                                  <ns10:className>COS_5_6</ns10:className>
                                  <ns10:matchValue>COS_5_6</ns10:matchValue>
                                  <ns10:cir>1000000000</ns10:cir>
                                  <ns10:cbs>12789</ns10:cbs>
                                  <ns10:eir>1000000000</ns10:eir>
                                  <ns10:ebs>22</ns10:ebs>
                                  <ns10:coupling>false</ns10:coupling>
                               </ns10:ciscoBWProfile>
                            </ns10:egressBandwidthProfile>
                         </ns10:ciscoCeSapAttributes>
                      </ns4:vendorExtensions>
                   </ns7:sap>
                </ns7:sapList>
             </ns7:inventoryData>
          </ns7:getServiceInventoryResponse>
       </soap:Body>
    </soap:Envelope>
```

9.45.3 CE Service SAP SOAP Response for QinQ

```
    <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
       <soap:Header>
          <header
    xmlns:ns13="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
    xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
    xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
    xmlns:ns10="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
    xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
    xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
    xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
    xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
    xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
    xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
    xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
    xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
    xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
       </soap:Header>
       <soap:Body>
          <ns7:getServiceInventoryResponse
    xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
    xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
    xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
    xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
    xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
```

```
    xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
    xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
    xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
    xmlns:ns10="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
    xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
    xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
    xmlns:ns13="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1">
             <ns7:inventoryData>
                <ns7:sapList>
                   <ns7:sap>
                      <ns4:name>
                         <ns3:rdn>
                            <ns3:type>MD</ns3:type>
                            <ns3:value>CISCO_EPNM</ns3:value>
                         </ns3:rdn>
                         <ns3:rdn>
                            <ns3:type>SAP</ns3:type>
                     <ns3:value>cfs=EVPL X MyServiceI21;sap=1011086</ns3:value>
                         </ns3:rdn>
                      </ns4:name>
                      <ns4:vendorExtensions>
                         <ns10:ciscoCeSapAttributes>
                            <ns12:portRef>
                               <ns3:rdn>
                                  <ns3:type>MD</ns3:type>
                                  <ns3:value>CISCO_EPNM</ns3:value>
                               </ns3:rdn>
                               <ns3:rdn>
                                  <ns3:type>UNI</ns3:type>
                                 <ns3:value>evpl_qinq_my-s-uni-a-2</ns3:value>
                               </ns3:rdn>
                            </ns12:portRef>
    <ns10:portSpeedRate>10 Mbps</ns10:portSpeedRate>
                            <ns10:portMode>FULL DUPLEX</ns10:portMode>
                           <ns10:bundlingIndicator>true</ns10:bundlingIndicator>
                            <ns10:allToOneIndicator>false</ns10:allToOneIndicator>
<ns10:l2ControlProtocolProfile>MEF Option 1</ns10:l2ControlProtocolProfile>
                            <ns10:portMtuSize>8000</ns10:portMtuSize>
              <ns10:portServiceMuxIndicator>true</ns10:portServiceMuxIndicator>
                         <ns10:portMaxNumOfVCs>2147483647</ns10:portMaxNumOfVCs>
                            <ns10:portEnableOAM>true</ns10:portEnableOAM>
           <ns10:portEnableLinkManagement>true</ns10:portEnableLinkManagement>
                            <ns10:ceVLANIdList>1001</ns10:ceVLANIdList>
                            <ns10:matchUntagged>false</ns10:matchUntagged>
                            <ns10:role>Root</ns10:role>
                            <ns10:ingressBandwidthProfile/>
                            <ns10:egressBandwidthProfile>
                               <ns10:ciscoBWProfile>
                                  <ns10:cir>1000</ns10:cir>
                                  <ns10:cbs>12768</ns10:cbs>
                                  <ns10:eir>0</ns10:eir>
                                  <ns10:ebs>0</ns10:ebs>
                                  <ns10:coupling>false</ns10:coupling>
                               </ns10:ciscoBWProfile>
                            </ns10:egressBandwidthProfile>
                            <ns10:matchType>dot1q</ns10:matchType>
```

```
                    <ns10:innerVlanIdList>202,210-230</ns10:innerVlanIdList>
                           <ns10:priorityTagged>false</ns10:priorityTagged>
                           <ns10:matchExact>false</ns10:matchExact>
                           <ns10:rewriteDefinition>
                              <ns10:popOperation>
                                 <ns10:tagCount>one</ns10:tagCount>
                              </ns10:popOperation>
                           </ns10:rewriteDefinition>
                        </ns10:ciscoCeSapAttributes>
                     </ns4:vendorExtensions>
                     <ns6:operationalState>DISABLED</ns6:operationalState>
                     <ns6:resourceRef>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>ME</ns3:type>
                        <ns3:value>ASR901-CSG-1-DOMAIN2.cisco.com</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>CPTP</ns3:type>
                           <ns3:value>GigabitEthernet0/3 EFPID 2</ns3:value>
                        </ns3:rdn>
                     </ns6:resourceRef>
                  </ns7:sap>
               </ns7:sapList>
            </ns7:inventoryData>
         </ns7:getServiceInventoryResponse>
      </soap:Body>
   </soap:Envelope>
```

9.45.4 DWDM/OTN Service SOAP Resquest

Various request can be made based on serviceType, Granularity and CFS and SAP RDN. The possible requests types of getServiceInventory for SAP Data are:

ServiceObjectType	ServiceType	Granularity	CFS RDN	SAP RDN	Description
SAP	OCHCC / OCHNC / OCHTRAIL /ODU_TUNNEL / ODU_UNI	NAME/FULL	0	0	Give all SAP name/ full object instances
SAP	OCHCC / OCHNC / OCHTRAIL /ODU_TUNNEL / ODU_UNI	NAME/FULL	1	0	Give all SAP name/ full object instances under a particular CFS_ID
SAP	OCHCC / OCHNC / OCHTRAIL /ODU_TUNNEL / ODU_UNI	NAME/FULL	1	1	Give one SAP name/ full object instance under a particular CFS_ID
SAP	OCHCC / OCHNC / OCHTRAIL /ODU_TUNNEL / ODU_UNI	NAME/FULL	0	1	Give one SAP name/ full object instance

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getServiceInventoryRequest>
         <v11:filter>
            <!--You have a CHOICE of the next 2 items at this level-->
             <v11:scope>
               <!--Zero or more repetitions:-->
               <v11:baseInstance>
                  <!--1 or more repetitions:-->
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>OCHCC</v12:value>
                  </v12:rdn>
               </v11:baseInstance>
               <v11:serviceObjectType>SAP</v11:serviceObjectType>
            </v11:scope>
            <v11:selection>FULL</v11:selection>
         </v11:filter>
      </v11:getServiceInventoryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.45.5 DWDM/OTN Service SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns18="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns10="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns7:getServiceInventoryResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns10="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1">
         <ns7:inventoryData>
            <ns7:sapList>
               <ns7:sap>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>SAP</ns3:type>
                        <ns3:value>cfs=OTU4-over-trail;sap=701815</ns3:value>
                     </ns3:rdn>
                  </ns4:name>
                  <ns4:vendorExtensions>
                     <ns13:ciscoOpticalSapAttributes>
                        <ns13:ipAddress>10.58.235.160</ns13:ipAddress>
                        <ns13:name>AGGR-3-7-1-1</ns13:name>
                        <ns13:displayName>701815</ns13:displayName>
                        <ns13:instanceId>701815</ns13:instanceId>
                        <ns13:role>DST</ns13:role>
                        <ns13:protocolEndpoint/>
                     </ns13:ciscoOpticalSapAttributes>
                  </ns4:vendorExtensions>
               </ns7:sap>
               <ns7:sap>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
```

```
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>SAP</ns3:type>
               <ns3:value>cfs=OTU4-over-trail;sap=701816</ns3:value>
            </ns3:rdn>
         </ns4:name>
         <ns4:vendorExtensions>
            <ns13:ciscoOpticalSapAttributes>
               <ns13:ipAddress>10.58.235.159</ns13:ipAddress>
               <ns13:name>AGGR-3-7-1-1</ns13:name>
               <ns13:displayName>701816</ns13:displayName>
               <ns13:instanceId>701816</ns13:instanceId>
               <ns13:role>SRC</ns13:role>
               <ns13:protocolEndpoint/>
            </ns13:ciscoOpticalSapAttributes>
         </ns4:vendorExtensions>
      </ns7:sap>
      <ns7:sap>
         <ns4:name>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>SAP</ns3:type>
               <ns3:value>cfs=100G;sap=701817</ns3:value>
            </ns3:rdn>
         </ns4:name>
         <ns4:vendorExtensions>
            <ns13:ciscoOpticalSapAttributes>
               <ns13:ipAddress>10.58.235.160</ns13:ipAddress>
               <ns13:name>AGGR-2-7-1-1</ns13:name>
               <ns13:displayName>701817</ns13:displayName>
               <ns13:instanceId>701817</ns13:instanceId>
               <ns13:role>DST</ns13:role>
               <ns13:protocolEndpoint/>
            </ns13:ciscoOpticalSapAttributes>
         </ns4:vendorExtensions>
      </ns7:sap>
      <ns7:sap>
         <ns4:name>
            <ns3:rdn>
               <ns3:type>MD</ns3:type>
               <ns3:value>CISCO_EPNM</ns3:value>
            </ns3:rdn>
            <ns3:rdn>
               <ns3:type>SAP</ns3:type>
               <ns3:value>cfs=100G;sap=701818</ns3:value>
            </ns3:rdn>
         </ns4:name>
         <ns4:vendorExtensions>
            <ns13:ciscoOpticalSapAttributes>
               <ns13:ipAddress>10.58.235.159</ns13:ipAddress>
               <ns13:name>AGGR-2-6-1-1</ns13:name>
               <ns13:displayName>701818</ns13:displayName>
               <ns13:instanceId>701818</ns13:instanceId>
```

```
                        <ns13:role>SRC</ns13:role>
                        <ns13:protocolEndpoint/>
                     </ns13:ciscoOpticalSapAttributes>
                  </ns4:vendorExtensions>
               </ns7:sap>
               <ns7:sap>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>SAP</ns3:type>
                        <ns3:value>cfs=ochCC-respin-
anand;sap=701851</ns3:value>
                     </ns3:rdn>
                  </ns4:name>
                  <ns4:vendorExtensions>
                     <ns13:ciscoOpticalSapAttributes>
                        <ns13:ipAddress>10.58.229.73</ns13:ipAddress>
                        <ns13:name>VFAC-5-3-1</ns13:name>
                        <ns13:displayName>701851</ns13:displayName>
                        <ns13:instanceId>701851</ns13:instanceId>
                        <ns13:role>SRC</ns13:role>
                        <ns13:protocolEndpoint/>
                     </ns13:ciscoOpticalSapAttributes>
                  </ns4:vendorExtensions>
               </ns7:sap>
               <ns7:sap>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
                     <ns3:rdn>
                        <ns3:type>SAP</ns3:type>
                        <ns3:value>cfs=ochCC-respin-
anand;sap=701852</ns3:value>
                     </ns3:rdn>
                  </ns4:name>
                  <ns4:vendorExtensions>
                     <ns13:ciscoOpticalSapAttributes>
                        <ns13:ipAddress>10.58.234.38</ns13:ipAddress>
                        <ns13:name>FAC-1-1-1-1</ns13:name>
                        <ns13:displayName>701852</ns13:displayName>
                        <ns13:instanceId>701852</ns13:instanceId>
                        <ns13:role>DST</ns13:role>
                     </ns13:ciscoOpticalSapAttributes>
                  </ns4:vendorExtensions>
               </ns7:sap>
               <ns7:sap>
                  <ns4:name>
                     <ns3:rdn>
                        <ns3:type>MD</ns3:type>
                        <ns3:value>CISCO_EPNM</ns3:value>
                     </ns3:rdn>
```

```
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                           <ns3:value>cfs=REYA_OCHCC_24-07-Test-
01;sap=701861</ns3:value>
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns13:ciscoOpticalSapAttributes>
                           <ns13:ipAddress>10.58.235.159</ns13:ipAddress>
                           <ns13:name>VFAC-5-2-1-1</ns13:name>
                           <ns13:displayName>701861</ns13:displayName>
                           <ns13:instanceId>701861</ns13:instanceId>
                           <ns13:role>SRC</ns13:role>
                           <ns13:protocolEndpoint/>
                        </ns13:ciscoOpticalSapAttributes>
                     </ns4:vendorExtensions>
                  </ns7:sap>
                  <ns7:sap>
                     <ns4:name>
                        <ns3:rdn>
                           <ns3:type>MD</ns3:type>
                           <ns3:value>CISCO_EPNM</ns3:value>
                        </ns3:rdn>
                        <ns3:rdn>
                           <ns3:type>SAP</ns3:type>
                           <ns3:value>cfs=REYA_OCHCC_24-07-Test-
01;sap=701862</ns3:value>
                        </ns3:rdn>
                     </ns4:name>
                     <ns4:vendorExtensions>
                        <ns13:ciscoOpticalSapAttributes>
                           <ns13:ipAddress>10.58.235.160</ns13:ipAddress>
                           <ns13:name>FAC-4-2-1-1</ns13:name>
                           <ns13:displayName>701862</ns13:displayName>
                           <ns13:instanceId>701862</ns13:instanceId>
                           <ns13:role>DST</ns13:role>
                           <ns13:protocolEndpoint/>
                        </ns13:ciscoOpticalSapAttributes>
                     </ns4:vendorExtensions>
                  </ns7:sap>
               </ns7:sapList>
            </ns7:inventoryData>
         </ns7:getServiceInventoryResponse>
      </soap:Body>
</soap:Envelope>
```

9.46 provision - DWDM services

9.46.1 DWDM Services SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
```

```
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
<v11:provisionRequest>
            <!--Optional: -->
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
               <!--You may enter ANY elements at this point-->
               <ciscoOptProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">
                  <ciscoOptServiceOrderData>
                     <customer>"Vodafone"</customer>
                     <serviceName>ochtrail-demo-ochnc-v123</serviceName>
                     <serviceDescription>str1234</serviceDescription>

                     <operationType>ProvideService</operationType>

                     <circuitType>OCHTRAIL</circuitType>
                     <direction>UNIDIRECTIONAL</direction>
                     <uni>true</uni>
                     <protectionType>NONE</protectionType>
                     <label>str1234</label>
                     <validation>NONE</validation>
                     <opticalThreshold>GREEN</opticalThreshold>
                     <opticalThresholdProtected>GREEN</opticalThresholdProtec
                     ted>
                     <upstreamChannelPowerOffset>3.14159</upstreamChannelPowe
                     rOffset>
                     <downstreamChannelPowerOffset>3.14159</downstreamChannel
                     PowerOffset>
                     <ignorePathAlarm>true</ignorePathAlarm>
                     <allowRegeneration>true</allowRegeneration>
                     <restoration>NONE</restoration>
                     <revert>AUTOMATIC</revert>
                     <soakTime>12:12:12</soakTime>
                     <priority>HIGH</priority>
                     <validationRestoration>NONE</validationRestoration>
                     <opticalThresholdRestoration>GREEN</opticalThresholdRest
                     oration>
                     <opticalThresholdRestorationProtected>GREEN</opticalThre
                     sholdRestorationProtected>
                     <frequency>3.14159</frequency>
                     <width>12345</width>
                     <frequencyRequired>true</frequencyRequired>
                     <frequencyProtected>3.14159</frequencyProtected>
                     <widthProtected>3.14159</widthProtected>
<frequencyProtectedRequired>true</frequencyProtectedRequired>
                     <recordRoute>true</recordRoute>
                     <openEnd>true</openEnd>
                     <bandwidth>NONE</bandwidth>
                     <framingType>CBR</framingType>
                     <bitRate>12345</bitRate>
                     <protectionProfile>str1234</protectionProfile>
                     <aEndTpList>
                        <endpointData>
```

```
                        <-- the PTP RDN value is returned by the call to
getallPhysicalTerminationPoints -->
                           <portRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-
                                 225.cisco.com</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>

<v12:value>name=Optics0/14/0/3;LR=LR_PHYSICAL_OPTICAL</v12:value>
                              </v12:rdn>
                           </portRef>
                           <role>AEND</role>
                        <-- localdrop is mandatory for OCHNC -->
                           <localDropRef>
                             <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-
                                 225.cisco.com</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>
<v12:value>name=Optics0/14/0/5;LR=LR_PHYSICAL_OPTICAL</v12:value>
                              </v12:rdn>
                           </localDropRef>
                        </endpointData>
                     </aEndTpList>
                     <zEndTpList>
                        <endpointData>
                           <portRef>
<-- the PTP RDN value is returned by the call to
getallPhysicalTerminationPoints -->
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-
                                 222.cisco.com</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>
<v12:value>name=Optics0/14/0/4;LR=LR_PHYSICAL_OPTICAL</v12:value>
                              </v12:rdn>
                           </portRef>
```

```
                           <role>ZEND</role>
                        <!-- LocalDrop is mandatory for OCHNC -->
                           <localDropRef>
                             <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-
                                 222.cisco.com</v12:value>
                              </v12:rdn>
<-- the PTP RDN value is returned by the call to
getallPhysicalTerminationPoints -->
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>
                                 <v12:value>
name=Optics0/14/0/3;LR=LR_PHYSICAL_OPTICAL</v12:value>
                              </v12:rdn>
                           </localDropRef>

                        </endpointData>
                     </zEndTpList>
                     <constraints>
                        <constraintsData>
                              <constraintName>ONS15454-TURIN</constraintName>
                              <constraintRef>
                                    <v12:rdn>
                                          <v12:type>MD</v12:type>
                                          <v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
<-- the ME RDN value is returned by the call to getAllManagedElements -->
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value> cvg-scapa-225.cisco.com
</v12:value>
                              </v12:rdn>
                              </constraintRef>
                              <constraintAs>INCLUDE</constraintAs>
                              <route>WORK</route>
                        </constraintsData>
                        <constraintsData>
                              <constraintName>LINK_778</constraintName>
                              <constraintRef>
                                    <v12:rdn>
                                          <v12:type>MD</v12:type>
                                          <v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-225.cisco.com
</v12:value>
                              </v12:rdn>
<-- the OPTICAL_LINK_INTERFACE RDN value is returned by the call to
getAllOpticalLinkInterfaces and taking those values which has Links -->
```

```
                              <v12:rdn>
                                 <v12:type>OPTICAL_LINK_INTERFACE</v12:type>
                                 <v12:value>942520</v12:value>
                              </v12:rdn>
                                          </constraintRef>

                              <constraintAs>EXCLUDE</constraintAs>
                              <route>WORK</route>
                           </constraintsData>
                        </constraints>
                        <extendedData/>
                     </ciscoOptServiceOrderData>
                  </ciscoOptProvisionServiceRequest>
               </v11:vendorExtensions>
               <v11:productInfo>
                  <v11:productName>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>SERVICE_TYPE</v12:type>
                        <v12:value>OCH-Trail</v12:value>
                     </v12:rdn>
                  </v11:productName>
                  <!--Optional:-->
                  <!--Optional:-->
                  <!--You have a CHOICE of the next 2 items at this level-->
               </v11:productInfo>
               <!--Zero or more repetitions:-->
               <v11:subscriberRefList>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>CUSTOMER</v12:type>
                     <v12:value>customer101</v12:value>
                  </v12:rdn>
               </v11:subscriberRefList>
               <!--Zero or more repetitions:-->
               <!--Zero or more repetitions:-->
            </v11:basicInput>
         <v11:soaInput>
               <!-- Storm: ignored, but required in request for schema valid
request -->
               <v11:requestedCompletionDate>2014-10-06T00:08:15.328-07:00
               </v11:requestedCompletionDate>
               <v11:priority>0</v11:priority>
               <v11:purchaseOrder>NONE</v11:purchaseOrder>
               <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
         </v11:soaInput>
</v11:provisionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.46.2 DWDM Services SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>7937</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
```

```
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>OCHNC</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>ochtrail-demo-ochnc-v123</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>7938</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>OCHNC</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult>
                  <ns17:result deviceName="NCS2KA-141" deviceId="543550">ENT-
CPS::LINE-1-2-1-TX:ctag::10.58.235.142,LINE-1-2-1-TX,2WAY,ADD:CKTID=ochnc-
test-v-
1,VALMODE=NONE,VALMODESEC=NONE,RESTTYPE=NONE,CKTLABEL="str1234",FREQ=3.14159,
WIDTH=12345,CKTPRIORITY=0,ALLOWRGN=Y,PATHPOLICY=ANY,DSPWROFS=3.14159,USPWROFS
=3.14159:;
OPR-CPS::LINE-1-2-1-TX:ctag:::CKTID=ochnc-test-v-
1,IGNPATHALM=YES;</ns17:result>
               </ns17:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>ochtrail-demo-ochnc-v123</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.47 provision – OTN services

9.47.1 OTN Services SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header/>
   </soapenv:Header>
   <soapenv:Body>
      <v11:provisionRequest>
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
               <!--You may enter ANY elements at this point-->
               <ciscoOptProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">
                  <ciscoOptServiceOrderData>
                     <customer>"Verizon"</customer>
                     <serviceName>oduuni-test-v-1</serviceName>
                     <serviceDescription>str1234</serviceDescription>
                     <operationType>ProvideService</operationType>
                     <direction>UNIDIRECTIONAL</direction>
                     <recordRoute>true</recordRoute>
                     <openEnd>true</openEnd>
                     <otnServiceType>OTN_OPU_FLEX</otnServiceType>
                     <bandwidth>ODUFlex</bandwidth>
                     <framingType>GFP-F-Fixed</framingType>
                     <protection>ONE_PLUS_ONE</protection>
                     <bitRate>200</bitRate>
                     <protectionProfile>str1234</protectionProfile>
                     <aEndTpList>
                        <endpointData>
                           <portRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-228.cisco.com</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>FTP</v12:type>
                                 <v12:value>
name=GigabitEthCtrlr0/5/0/0;LR=LR_DSR_Gigabit_Ethernet</v12:value>
                              </v12:rdn>
                           </portRef>
                           <role>AEND</role>
                        </endpointData>
                     </aEndTpList>
                     <zEndTpList>
                        <endpointData>
                           <portRef>
```

```
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-235.cisco.com</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>FTP</v12:type>
                                 <v12:value>
name=GigabitEthCtrlr0/5/0/3;LR=LR_DSR_Gigabit_Ethernet</v12:value>
                              </v12:rdn>
                           </portRef>
                           <role>ZEND</role>
                        </endpointData>
                     </zEndTpList>
                                          <pathOptions>
                        <pathOptionData>
                              <index>1</index>
                              <option>WORKING</option>
                              <type>DYNAMIC</type>
                              <protectedBy>3</protectedBy>
                              <restoredBy>NONE</restoredBy>
                        </pathOptionData>
                        <pathOptionData>
                              <index>2</index>
                              <option>PROTECTED</option>
                              <type>EXPLICIT</type>
                              <nameRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>TEPATH</v12:type>
                                 <v12:value>555576</v12:value>
                              </v12:rdn>
                              </nameRef>
                              <!-- This parameter is not used -->
                              <nameId>NE-ID1</nameId>
                        </pathOptionData>
                     </pathOptions>
                     <extendedData/>
                  </ciscoOptServiceOrderData>
               </ciscoOptProvisionServiceRequest>
            </v11:vendorExtensions>
            <v11:productInfo>
               <v11:productName>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>ODU_UNI</v12:value>
```

```
                  </v12:rdn>
               </v11:productName>
               <!--Optional:-->
               <!--Optional:-->
               <!--You have a CHOICE of the next 2 items at this level-->
            </v11:productInfo>
            <!--Zero or more repetitions:-->
            <v11:subscriberRefList>
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>CUSTOMER</v12:type>
                  <v12:value>customer101</v12:value>
               </v12:rdn>
            </v11:subscriberRefList>
            <!--Zero or more repetitions:-->
            <!--Zero or more repetitions:-->
         </v11:basicInput>
         <v11:soaInput>
            <v11:requestedCompletionDate>2014-12-29T00:08:15.328-
07:00</v11:requestedCompletionDate>
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
            <v11:validFor>2014-12-29T00:08:15.328-07:00</v11:validFor>
         </v11:soaInput>
      </v11:provisionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.47.2 OTN Services SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
```

```
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns15="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/sodel/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>188</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>ODU_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>oduuni-test-v-1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>189</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
```

```
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>ODU_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult>
                  <ns17:result deviceName="nmtg-scapa-123"
deviceId="537559">mpls traffic-eng gmpls optical-nni controller odu-Group-Te
2
  signalled-name oduuni-test-v-112
  signalled-bandwidth ODU1
  record-route
  static-uni ingress-port controller GigabitEthernet 0/5/0/0
 egress-port unnumbered 53
  destination ipv4 unicast 10.58.235.222
  path-option 1 DYNAMIC protected-by none lockdown
  exit</ns17:result>
               </ns17:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>oduuni-test-v-1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.48 provision –TRAIL-UNI services

9.48.1 TRAIL-UNI Services SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
<v11:provisionRequest>
        <!--Optional: -->
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
               <!--You may enter ANY elements at this point-->
               <ciscoOptProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">
               <ciscoOptServiceOrderData>
                    <serviceName>TRAIL_UNI_Sep11_UNICONF</serviceName>
                           <serviceDescription>UNICONF</serviceDescription>
```

```
                    <uniConfig >
                        <protectionType>ONE_PLUS_ONE</protectionType>
                        <priority>HIGH</priority>
                        <validation>NONE</validation>
                        <opticalThreshold>GREEN</opticalThreshold>
                        <allowRegeneration>true</allowRegeneration>
                        <restoration>NONE</restoration>
                        <label>Reena_Sep11_TrailUNI</label>
                    </uniConfig >
                       <aEndTpList>
                        <endpointData>
                           <portRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-
227.cisco.com</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>

<v12:value>name=Optics0/6/0/3;LR=LR_PHYSICAL_OPTICAL</v12:value>
                              </v12:rdn>
                           </portRef>
                           <role>AEND</role>
                        </endpointData>
                     </aEndTpList>
                     <zEndTpList>
                        <endpointData>
                           <portRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-
224.cisco.com</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>

<v12:value>name=Optics0/6/0/2;LR=LR_PHYSICAL_OPTICAL</v12:value>
                              </v12:rdn>
                           </portRef>
                           <role>ZEND</role>
                        </endpointData>
                     </zEndTpList>
                     <constraints/>
                     <extendedData/>
                  </ciscoOptServiceOrderData>
               </ciscoOptProvisionServiceRequest>
            </v11:vendorExtensions>
```

```
            <v11:productInfo>
               <v11:productName>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>TRAIL_UNI</v12:value>
                  </v12:rdn>
               </v11:productName>
               <!--Optional:-->
               <!--Optional:-->
               <!--You have a CHOICE of the next 2 items at this level-->
            </v11:productInfo>
            <!--Zero or more repetitions:-->
            <v11:subscriberRefList>
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>CUSTOMER</v12:type>
                  <v12:value>Infrastructure</v12:value>
               </v12:rdn>
            </v11:subscriberRefList>
            <!--Zero or more repetitions:-->
            <!--Zero or more repetitions:-->
         </v11:basicInput>
         <v11:soaInput>
            <v11:requestedCompletionDate>2014-12-29T00:08:15.328-
07:00</v11:requestedCompletionDate>
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
            <v11:validFor>2014-12-29T00:08:15.328-07:00</v11:validFor>
         </v11:soaInput>
</v11:provisionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.48.2 TRAIL-UNI Services SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns34="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
```

```
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns17="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns18="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
```

```
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns34="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>50893</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>TRAIL_UNI_Sep11_UNICONF</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>50894</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns27:deployResult>
                  <ns27:result deviceName="454A-236-109"
deviceId="953967">ED-UNICFG::CHAN-2-13-7-
RX:1:::VALMODE=NONE,RESTTYPE=NONE,CKTLABEL=Reena_Sep11_TrailUNI,DESCR="UNICON
F";</ns27:result>
                  <ns27:result deviceName="cvg-scapa-227.cisco.com"
deviceId="953971">mpls traffic-eng gmpls optical-uni controller Optics
0/6/0/3 tunnel-properties
```

```
  signalled-name TRAIL_UNI_Sep11_UNICONF
  tunnel-id 1
  destination ipv4 unicast 31.31.31.31
  path-option 10 no-ero lockdown
  exit</ns27:result>
                  <ns27:result deviceName="cvg-scapa-224.cisco.com"
deviceId="953969">mpls traffic-eng gmpls optical-uni controller Optics
0/6/0/2
  exit</ns27:result>
               </ns27:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>TRAIL_UNI_Sep11_UNICONF</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.48.3 TRAIL-UNI Services with Diversity SOAP Request

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns38="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
```

```
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns18="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns38="http://www.tmforum.org/mtop/sb/xsd/sodel/v1">
```

```
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>6192</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>MtosiGreenTrailUni</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>6193</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns28:deployResult>
                  <ns28:result deviceName="NCS2006A-234-109"
deviceId="965989">ED-UNICFG::PLINE-4-15-
RX:1:::VALMODE=NONE,RESTVALMODE=FULL,RESTVALZONE=GREEN,RESTTYPE=RESTORE,CKTLA
BEL=alabel,DESCR="123",ADMINSTATE=UP;</ns28:result>
                  <ns28:result deviceName="cvg-scapa-222.cisco.com"
deviceId="965983">mpls traffic-eng gmpls optical-uni controller Optics
0/14/0/2 tunnel-properties
  signalled-name MtosiGreenTrailUni
  tunnel-id 1
  destination ipv4 unicast 10.58.235.225
  path-option 10 explicit name ExplictPathNameOptics0_14_0_2 lockdown
verbatim
  exit</ns28:result>
                  <ns28:result deviceName="cvg-scapa-225.cisco.com"
deviceId="965984">mpls traffic-eng gmpls optical-uni controller Optics
0/14/0/2
```

```
exit</ns28:result>
            </ns28:deployResult>
         </ns5:vendorExtensions>
         <ns5:serviceStateChangeList>
            <ns7:objectType>CFS</ns7:objectType>
            <ns7:objectName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>MtosiGreenTrailUni</ns4:value>
               </ns4:rdn>
            </ns7:objectName>
         </ns5:serviceStateChangeList>
      </ns3:cfsStateChange>
   </ns3:provisionResponse>
 </soap:Body>
  </soap:Envelope>
```

9.48.4 TRAIL-UNI Services with Diversity SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns38="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
```

```
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns18="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns38="http://www.tmforum.org/mtop/sb/xsd/sodel/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>6378</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
```

```
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>MtosiRedTrailUni</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>6379</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns28:deployResult>
                  <ns28:result deviceName="NCS2006A-234-109"
deviceId="965989">ED-UNICFG::PLINE-4-16-
RX:1:::VALMODE=NONE,RESTVALMODE=FULL,RESTVALZONE=GREEN,RESTTYPE=RESTORE,CKTLA
BEL=alabel,DESCR="123",ADMINSTATE=UP;</ns28:result>
                  <ns28:result deviceName="cvg-scapa-222.cisco.com"
deviceId="965983">mpls traffic-eng gmpls optical-uni controller Optics
0/14/0/3 tunnel-properties
  signalled-name MtosiRedTrailUni
  tunnel-id 3
  destination ipv4 unicast 10.58.235.225
  path-option 10 explicit name ExplictPathNameOptics0_14_0_3 xro-attribute-
set MtosiRedTrailUni-1-diverse-from lockdown verbatim
explicit-path name ExplictPathNameOptics0_14_0_3
  index 5 next-address strict ipv4 unicast unnumbered 10.58.234.109
2130707488
  index 10 next-address loose ipv4 unicast unnumbered 10.58.235.225 10
mpls traffic-eng attribute-set xro MtosiRedTrailUni-1-diverse-from
  exclude strict lsp source 10.58.235.222 destination 10.58.235.225 tunnel-id
1 extended-tunnel-id 10.58.235.222
  exit</ns28:result>
                  <ns28:result deviceName="cvg-scapa-225.cisco.com"
deviceId="965984">mpls traffic-eng gmpls optical-uni controller Optics
0/14/0/3
  exit</ns28:result>
```

```
            </ns28:deployResult>
         </ns5:vendorExtensions>
         <ns5:serviceStateChangeList>
            <ns7:objectType>CFS</ns7:objectType>
            <ns7:objectName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>MtosiRedTrailUni</ns4:value>
               </ns4:rdn>
            </ns7:objectName>
         </ns5:serviceStateChangeList>
      </ns3:cfsStateChange>
   </ns3:provisionResponse>
</soap:Body>
</soap:Envelope>
```

9.48.5 TRAIL-UNI Services with Explicit Path SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
<v11:provisionRequest>
        <!--Optional: -->
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
               <!--You may enter ANY elements at this point-->
               <ciscoOptProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">

               <ciscoOptServiceOrderData>
                     <serviceName>OCHTRAILUNI_LUIGI_EXPLICIT</serviceName>
                                                <serviceDescription>OCHT
RAIL_EXPLICIT</serviceDescription>
                                                                <opticalThresh
oldRestoration>GREEN</opticalThresholdRestoration>
                                                                <validationRes
toration>FULL</validationRestoration>
                                                                <adminState>UP
</adminState>
                                                                <tl1Descriptio
n>123</tl1Description>
                                                                <restorationMo
de>UNI_C</restorationMode>
```

```
                                                                    <revert>MANUAL
</revert>
                                                                    <soakTime>00:0
0:05</soakTime>
                                                          <uniConfig>

                                        <protectionType>NONE</protectionType>
                                        <priority>HIGH</priority>
                                                    <validation>NONE</validat
ion>
                                        <opticalThreshold>GREEN</opticalThres
hold>
                                        <allowRegeneration>TRUE</allowRegener
ation>
                                        <restoration>RESTORE</restoration>
                                        <label>alabel</label>
                                                    </uniConfig>
                                                    <explicitPath>

                                                   <nameRef>
                                                   <v12:rdn>
                                                               <v12:type>MD</
v12:type>
                                                              <v12:value>CISC
O-EPNM</v12:value>
                                                   </v12:rdn>
                                                   <v12:rdn>
                                                               <v12:type>ME</
v12:type>
                                                               <v12:value>cvg
-scapa-222.cisco.com</v12:value>
                                                   </v12:rdn>

                                                    <v12:rdn>
                                                              <v12:type>TEPAT
H</v12:type>
                                                               <v12:value>Exp
licitPath0_14_0_2to0_14_0_3</v12:value>
                                                   </v12:rdn>

                                                   </nameRef>>
                                                   <type>DYNAMIC</type>
                                                   <option>PROTECTED</option>
                                                   <protectedBy></protectedBy
>
                                                   <restoredBy>NONE</restored
By>
                                      </explicitPath>
                          <aEndTpList>
                           <endpointData>
                              <portRef>
                                 <v12:rdn>
                                    <v12:type>MD</v12:type>
                                    <v12:value>CISCO-EPNM</v12:value>
                                 </v12:rdn>
                                  <v12:rdn>
```

```
                                    <v12:type>ME</v12:type>
                                    <v12:value>cvg-scapa-
222.cisco.com</v12:value>
                                 </v12:rdn>
                                 <v12:rdn>
                                    <v12:type>PTP</v12:type>
                                    <v12:value>name=Optics0/14/0/2;LR=LR_PHYS
ICAL_OPTICAL</v12:value>
                                 </v12:rdn>
                              </portRef>
                              <role>AEND</role>
                           </endpointData>
                        </aEndTpList>
                        <zEndTpList>
                           <endpointData>
                              <portRef>
                                 <v12:rdn>
                                    <v12:type>MD</v12:type>
                                    <v12:value>CISCO-EPNM</v12:value>
                                 </v12:rdn>
                                 <v12:rdn>
                                    <v12:type>ME</v12:type>
                                    <v12:value>cvg-scapa-
225.cisco.com</v12:value>
                                 </v12:rdn>
                                 <v12:rdn>
                                    <v12:type>PTP</v12:type>
                                    <v12:value>name=Optics0/14/0/3;LR=LR_PHYS
ICAL_OPTICAL</v12:value>
                                 </v12:rdn>
                              </portRef>
                              <role>ZEND</role>
                           </endpointData>
                        </zEndTpList>
                        <constraints/>
                        <extendedData/>
                     </ciscoOptServiceOrderData>
                  </ciscoOptProvisionServiceRequest>
               </v11:vendorExtensions>
               <v11:productInfo>
                  <v11:productName>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>SERVICE_TYPE</v12:type>
                        <v12:value>TRAIL_UNI</v12:value>
                     </v12:rdn>
                  </v11:productName>
                  <!--Optional:-->
                  <!--Optional:-->
                  <!--You have a CHOICE of the next 2 items at this level-->
               </v11:productInfo>
               <!--Zero or more repetitions:-->
               <v11:subscriberRefList>
```

```
                <v12:rdn>
                   <v12:type>MD</v12:type>
                   <v12:value>CISCO_EPNM</v12:value>
                </v12:rdn>
                <v12:rdn>
                   <v12:type>CUSTOMER</v12:type>
                   <v12:value>Infrastructure</v12:value>
                </v12:rdn>
             </v11:subscriberRefList>
             <!--Zero or more repetitions:-->
             <!--Zero or more repetitions:-->
          </v11:basicInput>
          <v11:soaInput>
             <v11:requestedCompletionDate>2014-12-29T00:08:15.328-
07:00</v11:requestedCompletionDate>
             <v11:priority>0</v11:priority>
             <v11:purchaseOrder>NONE</v11:purchaseOrder>
             <v11:validFor>2014-12-29T00:08:15.328-07:00</v11:validFor>
          </v11:soaInput>
</v11:provisionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.48.6 TRAIL-UNI Services with Explicit Path SOAP Response

```
<soap:Envelope
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header
xmlns:ns38="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns32="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext
/v1" xmlns:ns31="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v
1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
```

```
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns18="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/err/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v
```

```
1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns32="http://www.cisco.com/epnm/mtop/nrf/xsd/protectp/ext
/v1" xmlns:ns33="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns35="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns36="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns37="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns38="http://www.tmforum.org/mtop/sb/xsd/soc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>37026</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>OCHTRAILUNI_LUIGI_EXPLICIT</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>37027</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>TRAIL_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns28:deployResult>
                  <ns28:result deviceName="NCS2006A-234-109"
deviceId="930935">ED-UNICFG::PLINE-4-15-
```

```
RX:1:::VALMODE=NONE,RESTVALMODE=FULL,RESTVALZONE=GREEN,RESTTYPE=RESTORE,CK
TLABEL=alabel,DESCR="123",ADMINSTATE=UP;</ns28:result>
                  <ns28:result deviceName="cvg-scapa-222.cisco.com"
deviceId="930938">mpls traffic-eng gmpls optical-uni controller Optics
0/14/0/2 tunnel-properties
  signalled-name OCHTRAILUNI_LUIGI_EXPLICIT
  tunnel-id 3
  destination ipv4 unicast 10.58.235.225
  path-option 10 no-ero lockdown
  exit</ns28:result>
                  <ns28:result deviceName="cvg-scapa-225.cisco.com"
deviceId="930934">mpls traffic-eng gmpls optical-uni controller Optics
0/14/0/3
  exit</ns28:result>
               </ns28:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>OCHTRAILUNI_LUIGI_EXPLICIT</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49 provision – Carrier Ethernet Services

9.49.1 EPL Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<v11:provisionRequest
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
    xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <v11:basicInput>
        <v11:vendorExtensions>
            <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                <ciscoCeServiceOrderData>
                    <serviceName>EPL_Service_1</serviceName>
                    <serviceDescription>EPL_Service_1
description</serviceDescription>
                    <bundling>false</bundling>
                    <ccmInterval>1 sec</ccmInterval>
                    <ceVlanIdPreservation>true</ceVlanIdPreservation>
                    <ceVlanCosPreservation>true</ceVlanCosPreservation>
                    <mtuSize>1522</mtuSize>
```

```
                    <faultManagementMap />
                    <maxUniEndpoints>2</maxUniEndpoints>
                    <!--==== Endpoints Configuration ==== -->
                    <aEndEpDataList>
                        <endpointData>
                            <portRef>
                                <v12:rdn>
                                    <v12:type>MD</v12:type>
                                    <v12:value>CISCO_EPNM</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                    <v12:type>ME</v12:type>
                                    <v12:value>prime-asr903-1</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                    <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                </v12:rdn>
                            </portRef>
                            <createUni>true</createUni>
                            <uniName>epl_my-uni-a-1</uniName>
                            <uniDescription>Some description of epl_my-
uni-a-1</uniDescription>
                            <l2cpProfile>MEF Option 1</l2cpProfile>
                            <qosProfileRef>
                                <v12:rdn>
                                    <v12:type>MD</v12:type>
                                    <v12:value>CISCO_EPNM</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                    <v12:type>QOS_PROFILE</v12:type>
                                    <v12:value>my_qos_profile1</v12:value>
                                </v12:rdn>
                            </qosProfileRef>
                            <portMtuSize>8000</portMtuSize>
                            <portSpeedRate>10 Mbps</portSpeedRate>
                            <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                            <portEnableOAM>true</portEnableOAM>
                            <vlanIdList>100</vlanIdList>
                        </endpointData>
                    </aEndEpDataList>
                    <zEndEpDataList>
                        <endpointData>
                            <portRef>
                                <v12:rdn>
                                    <v12:type>MD</v12:type>
                                    <v12:value>CISCO_EPNM</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                    <v12:type>ME</v12:type>
                                    <v12:value>prime-asr9k-
cluster</v12:value>
                                </v12:rdn>
```

```
                                    <v12:rdn>
                                        <v12:type>FTP</v12:type>

<v12:value>GigabitEthernet101/0/0/7</v12:value>
                                    </v12:rdn>
                                </portRef>
                                <createUni>true</createUni>
                                <uniName>epl_my-uni-z-1</uniName>
                                <l2cpProfile>MEF Option 1</l2cpProfile>
                                <portMtuSize>8000</portMtuSize>
                                <portSpeedRate>10 Mbps</portSpeedRate>
                                <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                <portEnableOAM>true</portEnableOAM>
                                <vlanIdList>100</vlanIdList>
                            </endpointData>
                        </zEndEpDataList>
                    </ciscoCeServiceOrderData>
                </ciscoCeProvisionServiceRequest>
            </v11:vendorExtensions>
            <v11:productInfo>
                <v11:productName>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>SERVICE_TYPE</v12:type>
                        <v12:value>EPL</v12:value>
                    </v12:rdn>
                </v11:productName>
            </v11:productInfo>
            <v11:subscriberRefList>
                <v12:rdn>
                    <v12:type>MD</v12:type>
                    <v12:value>CISCO_EPNM</v12:value>
                </v12:rdn>
                <v12:rdn>
                    <v12:type>CUSTOMER</v12:type>
                    <v12:value>cvg</v12:value>
                </v12:rdn>
            </v11:subscriberRefList>
        </v11:basicInput>
        <v11:soaInput>
            <!-- ignored -->
            <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
            <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
        </v11:soaInput>
</v11:provisionRequest>
```

9.49.2 EPL Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>139</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
```

```
                  <ns4:value>EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPL_Service_1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>140</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult >
                  <ns17:result deviceName="prime-asr903-1"
deviceId="950951">ethernet evc EPL_Service_1
interface GigabitEthernet0/0/3
  mtu 8000
  service instance 2 ethernet EPL_Service_1
    description EPL_Service_1 description
    encapsulation default
    xconnect 100.100.100.90 4 encapsulation mpls  pw-class controlWord
      mtu 1508
  exit</ns17:result>
                  <ns17:result deviceName="prime-asr9k-cluster"
deviceId="950950">interface GigabitEthernet101/0/0/7
  mtu 8000
  no shutdown
  exit
interface GigabitEthernet101/0/0/7.2 l2transport
  description EPL_Service_1 description
  encapsulation default
  mtu 1522
l2vpn
  xconnect group Verizon_Wireless
    p2p EPL_Service_1
      interface GigabitEthernet101/0/0/7.2
      neighbor ipv4 100.100.100.10 pw-id 4
        pw-class controlWord
```

```
        exit
      exit
    exit
  exit</ns17:result>
              </ns17:deployResult>
           </ns5:vendorExtensions>
           <ns5:serviceStateChangeList>
              <ns7:objectType>CFS</ns7:objectType>
              <ns7:objectName>
                 <ns4:rdn>
                    <ns4:type>MD</ns4:type>
                    <ns4:value>CISCO_EPNM</ns4:value>
                 </ns4:rdn>
                 <ns4:rdn>
                    <ns4:type>CFS</ns4:type>
                    <ns4:value>EPL_Service_1</ns4:value>
                 </ns4:rdn>
              </ns7:objectName>
           </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.3 EVPL Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>
                            <serviceName>EVPLService2</serviceName>
                            <serviceDescription>EVPLService2
description</serviceDescription>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!--==== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
```

```
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-
1</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evpl_x_my-uni-a-2</uniName>
                                    <uniDescription>Some description of
evpl_x_my-uni-a-2</uniDescription>
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <qosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>

<v12:value>my_qos_profile</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>
                                    <ceVlanId>1001</ceVlanId>
                                    <untagged>true</untagged>

<serviceMultiplexing>true</serviceMultiplexing>
                                    <uniBundling>true</uniBundling>
                                </endpointData>
                            </aEndEpDataList>
                            <zEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>
```

```
<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
cluster</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>GigabitEthernet101/0/0/7</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evpl_x_my-uni-z-2</uniName>
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <uniQosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>

<v12:value>my_qos_profile</v12:value>
                                        </v12:rdn>
                                    </uniQosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>
                                    <ceVlanId>1002</ceVlanId>
                                    <untagged>true</untagged>

<serviceMultiplexing>true</serviceMultiplexing>
                                    <uniBundling>true</uniBundling>
                                </endpointData>
                            </zEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
```

```
                            <v12:value>EVPL</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!-- ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.4 EVPL Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
```

```
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/sodel/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>206</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EVPLService2</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>207</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVPL</ns4:value>
```

```
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult >
                  <ns17:result deviceName="prime-asr903-1"
deviceId="950951">ethernet evc EVPLService2
interface GigabitEthernet0/0/3
  mtu 8000
  service instance 6 ethernet EVPLService2
    description EVPLService2 description
    encapsulation  untagged , dot1q 100
    xconnect 100.100.100.90 8 encapsulation mpls  pw-class controlWord
      mtu 1508
  exit</ns17:result>
                  <ns17:result deviceName="prime-asr9k-cluster"
deviceId="950950">interface GigabitEthernet101/0/0/7
  mtu 8000
  no shutdown
  exit
interface GigabitEthernet101/0/0/7.6 l2transport
  description EVPLService2 description
  encapsulation dot1q 100   ,  untagged
  mtu 1522
l2vpn
  xconnect group Verizon_Wireless
    p2p EVPLService2
      interface GigabitEthernet101/0/0/7.6
      neighbor ipv4 100.100.100.10 pw-id 8
        pw-class controlWord
        exit
      exit
    exit
  exit</ns17:result>
               </ns17:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EVPLService2</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.5 EVPL Provision with QinQ Configuration - SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>

<serviceName>EVPL_QinQ_MyService7</serviceName>
                            <serviceDescription>EVPL_QinQ_MyService7
description</serviceDescription>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!--==== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>tmh-chn-mvso-asr9k-
2.cisco.com</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evpl_qinq_my-uni-a-
7</uniName>
                                    <uniDescription>Some description of
evpl_x_my-uni-a-7</uniDescription>
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <qosProfileRef>
```

```
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>

<v12:value>my_qos_profile</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <ceVlanId>1001</ceVlanId>

<serviceMultiplexing>true</serviceMultiplexing>
                                    <uniBundling>true</uniBundling>
                                    <!--QinQ configuration params -->
                                    <matchType>dot1q</matchType>
                                    <vlanIdList>100,120-150</vlanIdList>
                                    <innerVlanIdList>200,210-
230</innerVlanIdList>
                                    <untagged>false</untagged>
                                    <priorityTagged>false</priorityTagged>
                                    <matchExact>false</matchExact>
                                    <vlanCoS>5</vlanCoS>
                                    <innerVlanCoS>5</innerVlanCoS>
                                    <etherType>
                                        <ipv4>true</ipv4>
                                        <ipv6>true</ipv6>
                                        <pppoeAll>true</pppoeAll>

<pppoeDiscovery>true</pppoeDiscovery>
                                        <pppoeSession>true</pppoeSession>
                                    </etherType>
                                    <rewriteDefinition>
                                        <popOperation>
                                            <tagCount>one</tagCount>
                                        </popOperation>
                                    </rewriteDefinition>
                                </endpointData>
                            </aEndEpDataList>
                            <zEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
```

```
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
cluster</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>PTP</v12:type>

<v12:value>name=GigabitEthernet1/1/0/13</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evpl_qinq_my-uni-z-
7</uniName>
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <qosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>

<v12:value>my_qos_profile</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <ceVlanId>1002</ceVlanId>

<serviceMultiplexing>true</serviceMultiplexing>
                                    <uniBundling>true</uniBundling>
                                    <!--QinQ configuration params -->
                                    <matchType>dot1q</matchType>
                                    <vlanIdList>110,130-150</vlanIdList>
                                    <innerVlanIdList>210,220-
230</innerVlanIdList>
                                    <untagged>false</untagged>
                                    <priorityTagged>false</priorityTagged>
                                    <matchExact>false</matchExact>
                                    <vlanCoS>5</vlanCoS>
                                    <innerVlanCoS>5</innerVlanCoS>
                                    <etherType>
                                        <ipv4>true</ipv4>
                                        <ipv6>true</ipv6>
                                        <pppoeAll>true</pppoeAll>

<pppoeDiscovery>true</pppoeDiscovery>
                                        <pppoeSession>true</pppoeSession>
                                    </etherType>
```

```
                                    <rewriteDefinition>
                                        <popOperation>
                                            <tagCount>one</tagCount>
                                        </popOperation>
                                    </rewriteDefinition>
                                </endpointData>
                            </zEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>EVPL</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!--Storm: ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.6 EVPL Provision with QinQ Configuration - SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
```

```
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>54265</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
```

```
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EVPL_QinQ_MyService7</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>54266</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns21:deployResult >
                  <ns21:result deviceName="tmh-chn-mvso-asr9k-2.cisco.com"
deviceId="934959">ethernet cfm
  domain EVC level 4
    service EVPL_QinQ_MyService7 xconnect group ATnT p2p
EVPL_QinQ_MyService7
policy-map MyQosSvc_Out_UM
  description Egress QOS Policy map MyQosSvc
  class class-default
    police rate 1000 burst 12768 peak-burst 12768
      conform-action transmit
      exceed-action transmit
      violate-action drop
interface GigabitEthernet0/0/0/3
  ethernet oam profile OAMProfile
  ethernet uni id evpl_qinq_my-uni-a-7
  ethernet lmi
  mtu 8000
  speed 10
  no shutdown
  exit
interface GigabitEthernet0/0/0/3.5 l2transport
  description EVPL_QinQ_MyService7 description
  encapsulation dot1q 100,120-150 second-dot1q 200,210-230
  rewrite ingress tag pop 1 symmetric
```

```
  mtu 1522
  service-policy output MyQosSvc_Out_UM
l2vpn
  xconnect group ATnT
    p2p EVPL_QinQ_MyService7
      interface GigabitEthernet0/0/0/3.5
      neighbor ipv4 100.100.100.90 pw-id 31
        pw-class controlWord
        exit
      exit
    exit
  exit</ns21:result>
                  <ns21:result deviceName="prime-asr9k-cluster"
deviceId="934957">ethernet cfm
  domain EVC level 4
    service EVPL_QinQ_MyService7 xconnect group ATnT p2p
EVPL_QinQ_MyService7
policy-map MyQosSvc_Out_UM
  description Egress QOS Policy map MyQosSvc
  class class-default
    police rate 1000 burst 12768 peak-burst 12768
      conform-action transmit
      exceed-action transmit
      violate-action drop
interface GigabitEthernet1/1/0/13
  ethernet oam profile OAMProfile
  ethernet uni id evpl_qinq_my-uni-z-7
  ethernet lmi
  mtu 8000
  speed 10
  no shutdown
  exit
interface GigabitEthernet1/1/0/13.5 l2transport
  description EVPL_QinQ_MyService7 description
  encapsulation dot1q 110,130-150 second-dot1q 210,220-230
  rewrite ingress tag pop 1 symmetric
  mtu 1522
  service-policy output MyQosSvc_Out_UM
l2vpn
  xconnect group ATnT
    p2p EVPL_QinQ_MyService7
      interface GigabitEthernet1/1/0/13.5
      neighbor ipv4 172.16.2.2 pw-id 31
        pw-class controlWord
        exit
      exit
    exit
  exit</ns21:result>
              </ns21:deployResult>
           </ns5:vendorExtensions>
           <ns5:serviceStateChangeList>
              <ns7:objectType>CFS</ns7:objectType>
              <ns7:objectName>
                 <ns4:rdn>
                    <ns4:type>MD</ns4:type>
                    <ns4:value>CISCO_EPNM</ns4:value>
```

```
                    </ns4:rdn>
                    <ns4:rdn>
                       <ns4:type>CFS</ns4:type>
                       <ns4:value>EVPL_QinQ_MyService7</ns4:value>
                    </ns4:rdn>
                 </ns7:objectName>
              </ns5:serviceStateChangeList>
           </ns3:cfsStateChange>
        </ns3:provisionResponse>
     </soap:Body>
</soap:Envelope>
```

9.49.7 Access EPL Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>
                            <serviceName>AccessEPLService2</serviceName>
                            <serviceDescription>AccessEPLService2
description</serviceDescription>
                            <bundling>true</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!--===== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-
1</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
```

```
                                        <v12:type>FTP</v12:type>
<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                    </v12:rdn>
                                </portRef>
                                <createUni>true</createUni>
                                <uniName>access_epl_x_my-uni-a-
2</uniName>
                                <uniDescription>Some description of
access_epl_x_my-uni-a-2</uniDescription>
                                <l2cpProfile>MEF Option
1</l2cpProfile>
                                <qosProfileRef>
                                    <v12:rdn>
                                        <v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
<v12:type>QOS_PROFILE</v12:type>
                                        <v12:value>789099</v12:value>
                                    </v12:rdn>
                                </qosProfileRef>
                                <portMtuSize>8000</portMtuSize>
                                <portSpeedRate>10 Mbps</portSpeedRate>
                                <portMode>FULL DUPLEX</portMode>
<portEnableLinkManagement>true</portEnableLinkManagement>
                                <portEnableOAM>true</portEnableOAM>
                            </endpointData>
                        </aEndEpDataList>
                        <zEndEpDataList>
                            <endpointData>
                                <portRef>
                                    <v12:rdn>
                                        <v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
                                        <v12:type>ME</v12:type>
                                        <v12:value>prime-asr9k-
cluster</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
                                        <v12:type>FTP</v12:type>
<v12:value>GigabitEthernet101/0/0/7</v12:value>
                                    </v12:rdn>
                                </portRef>
                                <createEnni>true</createEnni>
                                <enniMepGroup>ENNI Z</enniMepGroup>
                                <enniName>access_epl_x_my-uni-z-
2</enniName>
```

```
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <qosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>

<v12:value>my_qos_profile</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <svlanIdList>1001</svlanIdList>
                                    <operatorRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>CUSTOMER</v12:type>
                                            <v12:value>cvg</v12:value>
                                        </v12:rdn>
                                    </operatorRef>

<protectionMechanism>None</protectionMechanism>
                                    <frameFormat>Double
Tagged</frameFormat>
                                </endpointData>
                            </zEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>Access EPL</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
```

```
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!-- ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.8 Access EPL Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
```

```
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/sodel/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>241</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>Access EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>AccessEPLService2</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>242</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>Access EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult >
                  <ns17:result deviceName="prime-asr903-1"
deviceId="950951">interface GigabitEthernet0/0/3
```

```
  mtu 8000
  exit</ns17:result>
                  <ns17:result deviceName="prime-asr9k-cluster"
deviceId="950950">interface GigabitEthernet101/0/0/7
  mtu 8000
  no shutdown
  exit</ns17:result>
               </ns17:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>AccessEPLService2</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.9 Access EVPL Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                   <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                      <ciscoCeServiceOrderData>
                          <serviceName>AccessEVPLService1</serviceName>
                          <serviceDescription>AccessEVPLService1
description</serviceDescription>
                          <bundling>true</bundling>
                          <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                          <mtuSize>1522</mtuSize>
                          <faultManagementMap />
                          <maxUniEndpoints>2</maxUniEndpoints>
```

```
                            <!--==== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-
1</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>access_evpl_my-uni-a-
2</uniName>
                                    <uniDescription>Some description of
access_evpl_my-uni-a-2</uniDescription>
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>

<serviceMultiplexing>true</serviceMultiplexing>
                                    <uniBundling>true</uniBundling>
                                </endpointData>
                            </aEndEpDataList>
                            <zEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
cluster</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>GigabitEthernet101/0/0/7</v12:value>
```

```
                                        </v12:rdn>
                                    </portRef>
                                    <createEnni>true</createEnni>
                                    <enniMepGroup>ENNI Z</enniMepGroup>
                                    <enniName>access_evpl_my-uni-z-
2</enniName>
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>
                                    <svlanIdList>1001</svlanIdList>
                                    <operatorRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>CUSTOMER</v12:type>
                                            <v12:value>cvg</v12:value>
                                        </v12:rdn>
                                    </operatorRef>

<protectionMechanism>None</protectionMechanism>
                                    <frameFormat>Double
Tagged</frameFormat>
                                </endpointData>
                            </zEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>Access EVPL</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
```

```
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!-- ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.10 Access EVPL Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
```

```
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>309</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>Access EVPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>AccessEVPLService1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>310</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>Access EVPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult >
                  <ns17:result deviceName="prime-asr903-1"
deviceId="950951">interface GigabitEthernet0/0/3
  mtu 8000
  exit</ns17:result>
                  <ns17:result deviceName="prime-asr9k-cluster"
deviceId="950950">interface GigabitEthernet101/0/0/7
  mtu 8000
  no shutdown
```

```
  exit</ns17:result>
              </ns17:deployResult>
           </ns5:vendorExtensions>
           <ns5:serviceStateChangeList>
              <ns7:objectType>CFS</ns7:objectType>
              <ns7:objectName>
                 <ns4:rdn>
                    <ns4:type>MD</ns4:type>
                    <ns4:value>CISCO_EPNM</ns4:value>
                 </ns4:rdn>
                 <ns4:rdn>
                    <ns4:type>CFS</ns4:type>
                    <ns4:value>AccessEVPLService1</ns4:value>
                 </ns4:rdn>
              </ns7:objectName>
           </ns5:serviceStateChangeList>
        </ns3:cfsStateChange>
     </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.11 Access EVPL Provision with QinQ Configuration - SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>

<serviceName>AccessEVPL_QinQ_MyService7</serviceName>
                            <serviceDescription>AccessEVPL_QinQ MyService7
description</serviceDescription>
                            <bundling>true</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!-===== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
```

```
                                        <v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
                                        <v12:type>ME</v12:type>
                                        <v12:value>tmh-chn-mvso-asr9k-
2.cisco.com</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
                                        <v12:type>FTP</v12:type>
<v12:value>name=GigabitEthernet0/0/0/3</v12:value>
                                    </v12:rdn>
                                </portRef>
                                <createUni>true</createUni>
                                <uniName>access_evpl_qinq_my-uni-a-
7</uniName>
                                <uniDescription>Some description of
access_evpl_x_my-uni-a-7</uniDescription>
                                <l2cpProfile>MEF Option
1</l2cpProfile>
                                <uniQosProfileRef>
                                    <v12:rdn>
                                        <v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
<v12:type>QOS_PROFILE</v12:type>
<v12:value>my_qos_profile1</v12:value>
                                    </v12:rdn>
                                </uniQosProfileRef>
                                <qosProfileRef>
                                    <v12:rdn>
                                        <v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
<v12:type>QOS_PROFILE</v12:type>
<v12:value>my_qos_profile2</v12:value>
                                    </v12:rdn>
                                </qosProfileRef>
                                <portMtuSize>8000</portMtuSize>
                                <portSpeedRate>10 Mbps</portSpeedRate>
                                <portMode>FULL DUPLEX</portMode>
<portEnableLinkManagement>true</portEnableLinkManagement>
                                <portEnableOAM>true</portEnableOAM>
<serviceMultiplexing>true</serviceMultiplexing>
```

```
                                    <uniBundling>true</uniBundling>
                                    <!--QinQ configuration params -->
                                    <matchType>dot1q</matchType>
                                    <vlanIdList>100,120-150</vlanIdList>
                                    <innerVlanIdList>200,210-
230</innerVlanIdList>
                                    <priorityTagged>false</priorityTagged>
                                    <matchExact>false</matchExact>
                                    <vlanCoS>5</vlanCoS>
                                    <innerVlanCoS>5</innerVlanCoS>
                                    <etherType>
                                        <ipv4>true</ipv4>
                                        <ipv6>true</ipv6>
                                        <pppoeAll>true</pppoeAll>

<pppoeDiscovery>true</pppoeDiscovery>
                                        <pppoeSession>true</pppoeSession>
                                    </etherType>
                                    <rewriteDefinition>
                                        <popOperation>
                                            <tagCount>one</tagCount>
                                        </popOperation>
                                    </rewriteDefinition>
                                </endpointData>
                            </aEndEpDataList>
                            <zEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
cluster</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>PTP</v12:type>

<v12:value>GigabitEthernet1/1/0/13</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createEnni>true</createEnni>
                                    <enniMepGroup>ENNI Z</enniMepGroup>
                                    <enniName>access_evpl_qinq_my-uni-z-
7</enniName>
                                    <enniDescription>description of
access_evpl_qinq_my-uni-z-7</enniDescription>
                                    <l2cpProfile>MEF Option
1</l2cpProfile>
                                    <qosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>
```

```
<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>
                                            <v12:value>my-qos-
profile1</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <operatorRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>CUSTOMER</v12:type>
                                            <v12:value>cvg</v12:value>
                                        </v12:rdn>
                                    </operatorRef>

<protectionMechanism>None</protectionMechanism>
                                    <frameFormat>Double
Tagged</frameFormat>
                                    <!--QinQ Configuration params -->
                                    <matchType>dot1q</matchType>
                                    <vlanIdList>100,120-150</vlanIdList>
                                    <innerVlanIdList>200,210-
230</innerVlanIdList>
                                    <priorityTagged>true</priorityTagged>
                                    <matchExact>false</matchExact>
                                    <vlanCoS>5</vlanCoS>
                                    <innerVlanCoS>5</innerVlanCoS>
                                    <etherType>
                                        <ipv4>true</ipv4>
                                        <ipv6>true</ipv6>
                                        <pppoeAll>true</pppoeAll>

<pppoeDiscovery>true</pppoeDiscovery>
                                        <pppoeSession>true</pppoeSession>
                                    </etherType>
                                    <rewriteDefinition>
                                        <translateOperation>
                                            <tagTranslation>one-to-
one</tagTranslation>
                                            <matchType>dot1q</matchType>
                                            <innerVlanId>100</innerVlanId>
                                            <outerVlanId>150</outerVlanId>
                                        </translateOperation>
```

```
                                    </rewriteDefinition>
                                </endpointData>
                            </zEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>Access EVPL</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!--Storm: ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.12 Access EVPL Provision with QinQ Configuration - SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
```

```
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>53878</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>Access EVPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
```

```
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>AccessEVPL_QinQ_MyService7</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>53879</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>Access EVPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns21:deployResult >
                  <ns21:result deviceName="tmh-chn-mvso-asr9k-2.cisco.com"
deviceId="934959">policy-map MyQosSvc_Out_UM
  description Egress QOS Policy map MyQosSvc
  class class-default
    police rate 1000 burst 12768 peak-burst 12768
      conform-action transmit
      exceed-action transmit
      violate-action drop
interface GigabitEthernet0/0/0/3
  ethernet oam profile OAMProfile
  mtu 8000
  service-policy output MyQosSvc_Out_UM
  speed 10
  no shutdown
  exit
interface GigabitEthernet0/0/0/3.4 l2transport
  description AccessEVPL_QinQ MyService7 description
  encapsulation dot1q 100,120-150 second-dot1q 200,210-230
  rewrite ingress tag pop 1 symmetric
  mtu 1518
  service-policy output MyQosSvc_Out_UM
l2vpn
  xconnect group ATnT
    p2p AccessEVPL_QinQ_MyService7
      interface GigabitEthernet0/0/0/3.4
      neighbor ipv4 100.100.100.90 pw-id 30
        pw-class controlWord
        exit
```

```
      exit
    exit
  exit</ns21:result>
                  <ns21:result deviceName="prime-asr9k-cluster"
deviceId="934957">policy-map MyQosSvc_In_UM
  description Ingress QOS Policy map MyQosSvc
interface GigabitEthernet1/1/0/13
  mtu 8000
  speed 10
  no shutdown
  exit
interface GigabitEthernet1/1/0/13.4 l2transport
  description AccessEVPL_QinQ MyService7 description
  encapsulation dot1q 100,120-150 second-dot1q 200,210-230
  rewrite ingress tag translate 1-to-1 dot1q 150 symmetric
  mtu 1522
  service-policy input MyQosSvc_In_UM
l2vpn
  xconnect group ATnT
    p2p AccessEVPL_QinQ_MyService7
      interface GigabitEthernet1/1/0/13.4
      neighbor ipv4 172.16.2.2 pw-id 30
        pw-class controlWord
        exit
      exit
    exit
  exit</ns21:result>
              </ns21:deployResult>
           </ns5:vendorExtensions>
           <ns5:serviceStateChangeList>
              <ns7:objectType>CFS</ns7:objectType>
              <ns7:objectName>
                 <ns4:rdn>
                    <ns4:type>MD</ns4:type>
                    <ns4:value>CISCO_EPNM</ns4:value>
                 </ns4:rdn>
                 <ns4:rdn>
                    <ns4:type>CFS</ns4:type>
                    <ns4:value>AccessEVPL_QinQ_MyService7</ns4:value>
                 </ns4:rdn>
              </ns7:objectName>
           </ns5:serviceStateChangeList>
        </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.13 EP-LAN Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
```

```
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>
                            <serviceName>EPLANService2</serviceName>
                            <serviceDescription>EPLANService2
description</serviceDescription>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!--==== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-
1</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>eplan_x_my-uni-a-2</uniName>
                                    <uniDescription>Some description of
eplan_x_my-uni-a-2</uniDescription>
                                    <l2cpProfile>MEF EP-LAN/EP-
Tree</l2cpProfile>
                                    <qosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>
```

```
<v12:value>my_qos_profile</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>
                                    <primaryHub />
                                    <backupHub />
                                </endpointData>
                            </aEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>EP-LAN</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!--Storm: ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.14 EP-LAN Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
```

```
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>262</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EP-LAN</ns4:value>
```

```
            </ns4:rdn>
         </ns5:productName>
         <ns5:cfsCreationEvents>
            <ns7:objectType>CFS</ns7:objectType>
            <ns7:objectName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>EPLANService2</ns4:value>
               </ns4:rdn>
            </ns7:objectName>
         </ns5:cfsCreationEvents>
      </ns3:cfsCreation>
      <ns3:cfsStateChange>
         <ns5:serviceRequestRef>263</ns5:serviceRequestRef>
         <ns5:productName>
            <ns4:rdn>
               <ns4:type>MD</ns4:type>
               <ns4:value>CISCO_EPNM</ns4:value>
            </ns4:rdn>
            <ns4:rdn>
               <ns4:type>SERVICE_TYPE</ns4:type>
               <ns4:value>EP-LAN</ns4:value>
            </ns4:rdn>
         </ns5:productName>
         <ns5:vendorExtensions>
            <ns17:deployResult >
               <ns17:result deviceName="prime-asr903-1"
deviceId="950951">ethernet evc EPLANService2
interface GigabitEthernet0/0/3
  mtu 8000
  service instance 14 ethernet EPLANService2
    description EPLANService2 description
    encapsulation default
    bridge-domain 13
  exit</ns17:result>
            </ns17:deployResult>
         </ns5:vendorExtensions>
         <ns5:serviceStateChangeList>
            <ns7:objectType>CFS</ns7:objectType>
            <ns7:objectName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>EPLANService2</ns4:value>
               </ns4:rdn>
            </ns7:objectName>
         </ns5:serviceStateChangeList>
      </ns3:cfsStateChange>
   </ns3:provisionResponse>
```

```
   </soap:Body>
</soap:Envelope>
```

9.49.15 EVP-LAN Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>
                            <serviceName>EVPLANService2</serviceName>
                            <serviceDescription>EVPLANService2
description</serviceDescription>
                            <coreTechnology>VPLS</coreTechnology>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!--==== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-
1</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evplan_x_my-uni-a-2</uniName>
```

```
                                    <uniDescription>Some description of
evplan_x_my-uni-a-2</uniDescription>
                                    <l2cpProfile>MEF EVP-LAN/EVP-
Tree</l2cpProfile>
                                    <uniQosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>
                                            <v12:value>789088</v12:value>
                                        </v12:rdn>
                                    </uniQosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>

<serviceMultiplexing>true</serviceMultiplexing>
                                    <primaryHub />
                                    <backupHub />
                                </endpointData>
                            </aEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>EVP-LAN</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
```

```
                <!-- ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.16 EVP-LAN Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
```

```
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>285</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVP-LAN</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EVPLANService2</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>286</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVP-LAN</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult >
                  <ns17:result deviceName="prime-asr903-1"
deviceId="950951">ethernet evc EVPLANService2
interface GigabitEthernet0/0/3
  mtu 8000
  service instance 18 ethernet EVPLANService2
    description EVPLANService2 description
    encapsulation  dot1q 100
    bridge-domain 17
  exit</ns17:result>
               </ns17:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
```

```
                <ns7:objectType>CFS</ns7:objectType>
                <ns7:objectName>
                   <ns4:rdn>
                      <ns4:type>MD</ns4:type>
                      <ns4:value>CISCO_EPNM</ns4:value>
                   </ns4:rdn>
                   <ns4:rdn>
                      <ns4:type>CFS</ns4:type>
                      <ns4:value>EVPLANService2</ns4:value>
                   </ns4:rdn>
                </ns7:objectName>
             </ns5:serviceStateChangeList>
          </ns3:cfsStateChange>
       </ns3:provisionResponse>
    </soap:Body>
</soap:Envelope>
```

9.49.17 EVP-LAN Provision with Multi-UNI Configuration - SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>

<serviceName>EVPLAN_MultiUni_MyService7</serviceName>
                            <serviceDescription>EVPLAN_MultiUni_MyService7
description</serviceDescription>
                            <coreTechnology>VPLS</coreTechnology>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!--==== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
```

```
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>tmh-chn-mvso-asr9k-
2.cisco.com</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evplan_multi_uni_my-uni-a-
7</uniName>
                                    <uniDescription>Some description of
evplan_multi_uni_my-uni-a-7</uniDescription>
                                    <l2cpProfile>MEF EVP-LAN/EVP-
Tree</l2cpProfile>
                                    <qosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>

<v12:value>my_qos_profile1</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>

<serviceMultiplexing>true</serviceMultiplexing>
                                </endpointData>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
cluster</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>
```

```
<v12:value>name=GigabitEthernet1/1/0/13</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evplan_multi_uni_my-uni-z-
7</uniName>
                                    <uniDescription>Some description of
evplan_multi_uni_my-uni-z-7</uniDescription>
                                    <l2cpProfile>MEF EVP-LAN/EVP-
Tree</l2cpProfile>
                                    <qosProfileRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>

<v12:type>QOS_PROFILE</v12:type>

<v12:value>my_profile_1</v12:value>
                                        </v12:rdn>
                                    </qosProfileRef>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>

<serviceMultiplexing>true</serviceMultiplexing>
                                </endpointData>
                            </aEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>EVP-LAN</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
```

```
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!--Storm: ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.18 EVP-LAN Provision with Multi-UNI Configuration - SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
```

```
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>54789</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVP-LAN</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EVPLAN_MultiUni_MyService7</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>54790</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EVP-LAN</ns4:value>
```

```
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns21:deployResult>
                  <ns21:result deviceName="tmh-chn-mvso-asr9k-2.cisco.com"
deviceId="934959">ethernet cfm
  domain EVC level 4
    service EVPLAN_MultiUni_MyService7 xconnect group ATnT p2p
EVPLAN_MultiUni_MyService7
policy-map MyQosSvc_Out_UM
  description Egress QOS Policy map MyQosSvc
  class class-default
    police rate 1000 burst 12768 peak-burst 12768
      conform-action transmit
      exceed-action transmit
      violate-action drop
interface GigabitEthernet0/0/0/3
  ethernet oam profile OAMProfile
  ethernet uni id evplan_multi_uni_my-uni-a-7
  ethernet lmi
  mtu 8000
  speed 10
  no shutdown
  exit
interface GigabitEthernet0/0/0/3.6 l2transport
  description EVPLAN_MultiUni_MyService7 description
  encapsulation dot1q 100
  mtu 1522
  service-policy output MyQosSvc_Out_UM
l2vpn
  bridge group ATnT
    bridge-domain EVPLAN_MultiUni_MyService7
      interface GigabitEthernet0/0/0/3.6
      vfi EVPLAN_MultiUni_MyService7
        neighbor 100.100.100.90 pw-id 32
          pw-class controlWord
          exit
        exit
      exit
    exit
  exit</ns21:result>
                  <ns21:result deviceName="prime-asr9k-cluster"
deviceId="934957">ethernet cfm
  domain EVC level 4
    service EVPLAN_MultiUni_MyService7 xconnect group ATnT p2p
EVPLAN_MultiUni_MyService7
policy-map MyQosSvc_Out_UM
  description Egress QOS Policy map MyQosSvc
  class class-default
    police rate 1000 burst 12768 peak-burst 12768
      conform-action transmit
      exceed-action transmit
      violate-action drop
interface GigabitEthernet1/1/0/13
  ethernet oam profile OAMProfile
  ethernet uni id evplan_multi_uni_my-uni-z-7
```

```
  ethernet lmi
  mtu 8000
  speed 10
  no shutdown
  exit
interface GigabitEthernet1/1/0/13.6 l2transport
  description EVPLAN_MultiUni_MyService7 description
  encapsulation dot1q 100
  mtu 1522
  service-policy output MyQosSvc_Out_UM
l2vpn
  bridge group ATnT
    bridge-domain EVPLAN_MultiUni_MyService7
      interface GigabitEthernet1/1/0/13.6
      vfi EVPLAN_MultiUni_MyService7
        neighbor 172.16.2.2 pw-id 32
          pw-class controlWord
          exit
        exit
      exit
    exit
  exit</ns21:result>
              </ns21:deployResult>
           </ns5:vendorExtensions>
           <ns5:serviceStateChangeList>
              <ns7:objectType>CFS</ns7:objectType>
              <ns7:objectName>
                 <ns4:rdn>
                    <ns4:type>MD</ns4:type>
                    <ns4:value>CISCO_EPNM</ns4:value>
                 </ns4:rdn>
                 <ns4:rdn>
                    <ns4:type>CFS</ns4:type>
                    <ns4:value>EVPLAN_MultiUni_MyService7</ns4:value>
                 </ns4:rdn>
              </ns7:objectName>
           </ns5:serviceStateChangeList>
        </ns3:cfsStateChange>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.19 EP-Tree Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
```

```
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>
                            <serviceName>EPTREEService1</serviceName>
                            <serviceDescription>EPTREEService1
description</serviceDescription>
                            <coreTechnology>H-VPLS</coreTechnology>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!-===== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-
1</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>eptree_x_my-uni-a-1</uniName>
                                    <uniDescription>Some description of
eplan_x_my-uni-a-1</uniDescription>
                                    <l2cpProfile>MEF EP-LAN/EP-
Tree</l2cpProfile>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>
                                    <primaryHub>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
```

```
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
1</v12:value>
                                        </v12:rdn>
                                    </primaryHub>
                                    <backupHub>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
2</v12:value>
                                        </v12:rdn>
                                    </backupHub>
                                    <designation>Root</designation>
                                </endpointData>
                            </aEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>EP-Tree</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!-- ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
```

```
</soapenv:Envelope>
```

9.49.20 EP-Tree Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>1379</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
```

```
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EP-Tree</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPTREEService1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:serviceStateTransitionFailureEvent>
            <ns8:cfsName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>EPTREEService1</ns4:value>
               </ns4:rdn>
            </ns8:cfsName>
         </ns3:serviceStateTransitionFailureEvent>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.21 EVP-Tree Provision SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:provisionRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeProvisionServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <ciscoCeServiceOrderData>
                            <serviceName>EVPTREEService1</serviceName>
```

```
                            <serviceDescription>EVPTREEService1
description</serviceDescription>
                            <coreTechnology>H-VPLS</coreTechnology>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1522</mtuSize>
                            <faultManagementMap />
                            <maxUniEndpoints>2</maxUniEndpoints>
                            <!--===== Endpoints Configuration ==== -->
                            <aEndEpDataList>
                                <endpointData>
                                    <portRef>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-
1</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>FTP</v12:type>

<v12:value>name=GigabitEthernet0/0/3</v12:value>
                                        </v12:rdn>
                                    </portRef>
                                    <createUni>true</createUni>
                                    <uniName>evptree_x_my-uni-a-
1</uniName>
                                    <uniDescription>Some description of
eplan_x_my-uni-a-1</uniDescription>
                                    <l2cpProfile>MEF EP-LAN/EP-
Tree</l2cpProfile>
                                    <portMtuSize>8000</portMtuSize>
                                    <portSpeedRate>10 Mbps</portSpeedRate>
                                    <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                                    <portEnableOAM>true</portEnableOAM>
                                    <vlanIdList>100</vlanIdList>

<serviceMultiplexing>true</serviceMultiplexing>
                                    <primaryHub>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
```

```
                                            <v12:value>prime-asr9k-
1</v12:value>
                                        </v12:rdn>
                                    </primaryHub>
                                    <backupHub>
                                        <v12:rdn>
                                            <v12:type>MD</v12:type>

<v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr9k-
1</v12:value>
                                        </v12:rdn>
                                    </backupHub>
                                    <designation>Leaf</designation>
                                </endpointData>
                            </aEndEpDataList>
                        </ciscoCeServiceOrderData>
                    </ciscoCeProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>EVP-Tree</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!-- ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
        </v11:provisionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.49.22 EVP-Tree Provision SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>1350</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
```

```
                  <ns4:rdn>
                     <ns4:type>SERVICE_TYPE</ns4:type>
                     <ns4:value>EVP-Tree</ns4:value>
                  </ns4:rdn>
               </ns5:productName>
               <ns5:cfsCreationEvents>
                  <ns7:objectType>CFS</ns7:objectType>
                  <ns7:objectName>
                     <ns4:rdn>
                        <ns4:type>MD</ns4:type>
                        <ns4:value>CISCO_EPNM</ns4:value>
                     </ns4:rdn>
                     <ns4:rdn>
                        <ns4:type>CFS</ns4:type>
                        <ns4:value>EVPTREEService1</ns4:value>
                     </ns4:rdn>
                  </ns7:objectName>
               </ns5:cfsCreationEvents>
            </ns3:cfsCreation>
            <ns3:serviceStateTransitionFailureEvent>
               <ns8:cfsName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EVPTREEService1</ns4:value>
                  </ns4:rdn>
               </ns8:cfsName>
            </ns3:serviceStateTransitionFailureEvent>
         </ns3:provisionResponse>
      </soap:Body>
   </soap:Envelope>
```

9.49.23 QOS Profile Provision SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header/>
   </soapenv:Header>
   <soapenv:Body>
      <v11:provisionRequest
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
      xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
            <ciscoCeQoSProfileProvisionServiceRequest
xmlns:ns2="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1" >
                  <ciscoCeQoSProfileOrderData>
                        <qosProfileName>MyQoSProfile 04/24</qosProfileName>
                        <applyToInterfaces>true</applyToInterfaces>
```

```
                        <applyToVirtual>true</applyToVirtual>
                        <applyToPrivate>true</applyToPrivate>
                        <qosClassification>PCP</qosClassification>
                        <qosOperationType>add</qosOperationType>
                        <qosBWProfileList>
            <ns2:ciscoQoSBWProfile>

<ns2:qosBWProfileType>EX_HIGH_BW_PROFILE</ns2:qosBWProfileType>
                <ns2:qosBWProfileAllowed>true</ns2:qosBWProfileAllowed>

<ns2:qosBWProfileMatchCriteria>1,2</ns2:qosBWProfileMatchCriteria>
                <ns2:qosBWProfile>
                    <ns2:className>EXTRA_HIGH</ns2:className>
                    <ns2:matchValue>value</ns2:matchValue>
                    <ns2:cir>cir</ns2:cir>
                    <ns2:cbs>cbs</ns2:cbs>
                    <ns2:eir>eir</ns2:eir>
                    <ns2:ebs>ebs</ns2:ebs>
                    <ns2:colorMode>colormode</ns2:colorMode>
                    <ns2:coupling>coupling</ns2:coupling>
                </ns2:qosBWProfile>
            </ns2:ciscoQoSBWProfile>
            <ns2:ciscoQoSBWProfile>
                <ns2:qosBWProfileType>HIGH_BW_PROFILE</ns2:qosBWProfileType>
                <ns2:qosBWProfileAllowed>true</ns2:qosBWProfileAllowed>

<ns2:qosBWProfileMatchCriteria>1,2</ns2:qosBWProfileMatchCriteria>
                <ns2:qosBWProfile>
                    <ns2:className>HIGH</ns2:className>
                    <ns2:matchValue>value</ns2:matchValue>
                    <ns2:cir>cir</ns2:cir>
                    <ns2:cbs>cbs</ns2:cbs>
                    <ns2:eir>eir</ns2:eir>
                    <ns2:ebs>ebs</ns2:ebs>
                    <ns2:colorMode>colormode</ns2:colorMode>
                    <ns2:coupling>coupling</ns2:coupling>
                </ns2:qosBWProfile>
            </ns2:ciscoQoSBWProfile>
            <ns2:ciscoQoSBWProfile>

<ns2:qosBWProfileType>MEDIUM_BW_PROFILE</ns2:qosBWProfileType>
                <ns2:qosBWProfileAllowed>true</ns2:qosBWProfileAllowed>

<ns2:qosBWProfileMatchCriteria>1,2</ns2:qosBWProfileMatchCriteria>
                <ns2:qosBWProfile>
                    <ns2:className>Medium</ns2:className>
                    <ns2:matchValue>value</ns2:matchValue>
                    <ns2:cir>cir</ns2:cir>
                    <ns2:cbs>cbs</ns2:cbs>
                    <ns2:eir>eir</ns2:eir>
                    <ns2:ebs>ebs</ns2:ebs>
                    <ns2:colorMode>colormode</ns2:colorMode>
                    <ns2:coupling>coupling</ns2:coupling>
                </ns2:qosBWProfile>
            </ns2:ciscoQoSBWProfile>
            <ns2:ciscoQoSBWProfile>
```

```
                <ns2:qosBWProfileType>LOW_BW_PROFILE</ns2:qosBWProfileType>
                <ns2:qosBWProfileAllowed>true</ns2:qosBWProfileAllowed>

<ns2:qosBWProfileMatchCriteria>1,2</ns2:qosBWProfileMatchCriteria>
                <ns2:qosBWProfile>
                    <ns2:className>Low</ns2:className>
                    <ns2:matchValue>value</ns2:matchValue>
                    <ns2:cir>cir</ns2:cir>
                    <ns2:cbs>cbs</ns2:cbs>
                    <ns2:eir>eir</ns2:eir>
                    <ns2:ebs>ebs</ns2:ebs>
                    <ns2:colorMode>colormode</ns2:colorMode>
                    <ns2:coupling>coupling</ns2:coupling>
                </ns2:qosBWProfile>
            </ns2:ciscoQoSBWProfile>
        </qosBWProfileList>
             </ciscoCeQoSProfileOrderData>
      </ciscoCeQoSProfileProvisionServiceRequest>
            </v11:vendorExtensions>
            <v11:productInfo>
               <v11:productName>
                  <!--1 or more repetitions:-->
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>PROFILE_TYPE</v12:type>
                     <v12:value>QoS_PROFILE</v12:value>
                  </v12:rdn>
               </v11:productName>
            </v11:productInfo>
            <v11:subscriberRefList>
               <!--1 or more repetitions:-->
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>CUSTOMER</v12:type>
                  <v12:value>496496</v12:value>
               </v12:rdn>
            </v11:subscriberRefList>
         </v11:basicInput>
         <v11:soaInput>
            <!--Storm: ignored-->
            <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
            <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
         </v11:soaInput>
      </v11:provisionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.49.24 QOS Profile Provision SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header>
<header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
</soap:Header>
<soap:Body>
<ns3:provisionResponse xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
```

```
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/sodel/v1">
<ns3:cfsCreation>
<ns5:serviceRequestRef>3796</ns5:serviceRequestRef>
<ns5:productName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>PROFILE_TYPE</ns4:type>
<ns4:value>QoS_PROFILE</ns4:value>
</ns4:rdn>
</ns5:productName>
<ns5:cfsCreationEvents>
<ns7:objectType>CFS</ns7:objectType>
<ns7:objectName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>CFS</ns4:type>
<ns4:value>MyQoSProfile 04/24</ns4:value>
</ns4:rdn>
</ns7:objectName>
</ns5:cfsCreationEvents>
</ns3:cfsCreation>
<ns3:cfsStateChange>
<ns5:serviceRequestRef>3797</ns5:serviceRequestRef>
<ns5:productName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>PROFILE_TYPE</ns4:type>
<ns4:value>QoS_PROFILE</ns4:value>
</ns4:rdn>
</ns5:productName>
<ns5:vendorExtensions>
<ns21:deployResult/>
</ns5:vendorExtensions>
<ns5:serviceStateChangeList>
<ns7:objectType>CFS</ns7:objectType>
<ns7:objectName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>CFS</ns4:type>
<ns4:value>MyQoSProfile 04/24</ns4:value>
</ns4:rdn>
```

```
</ns7:objectName>
</ns5:serviceStateChangeList>
</ns3:cfsStateChange>
</ns3:provisionResponse>
</soap:Body>
</soap:Envelope>
```

9.49.25 UNI Service Provision SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>

<v11:provisionRequest
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
  xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
  <v11:basicInput>
        <!--Optional: -->
        <v11:vendorExtensions>
              <!--You may enter ANY elements at this point -->
              <ciscoCeEPProvisionServiceRequest

  xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                    <ciscoCeEPServiceOrderData>
                          <serviceName>Test EP-LAN Service
1</serviceName>
                          <serviceDescription>Test EP-LANL Service 1
Description
                          </serviceDescription>

                          <endpointData>

                                <portRef>
                                      <v12:rdn>
                                            <v12:type>MD</v12:type>

  <v12:value>CISCO_EPNM</v12:value>
                                      </v12:rdn>
                                      <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value>prime-asr903-1
</v12:value>
                                      </v12:rdn>
                                      <v12:rdn>
                                            <v12:type>FTP</v12:type>
                                            <v12:value>
name=GigabitEthernet0/0/3</v12:value>
```

```
                                    </v12:rdn>
                                </portRef>
                                <uniQosProfileRef>
                                    <v12:rdn>
                                        <v12:type>MD</v12:type>

  <v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>

  <v12:type>QOS_PROFILE</v12:type>
                                        <v12:value>101010</v12:value>
                                    </v12:rdn>
                                </uniQosProfileRef>
                                <uniName>Test UNI</uniName>
                                <uniDescription>Test UNI for Service
Prov</uniDescription>

                                <!-- -->
                                <uniBundling>false</uniBundling>
                                <portMtuSize>8000</portMtuSize>
                                <portSpeedRate>10 Mbps</portSpeedRate>
                                <portMode>FULL DUPLEX</portMode>

  <portEnableLinkManagement>true</portEnableLinkManagement>
                                <portEnableOAM>true</portEnableOAM>
                                <ceVlanId>100</ceVlanId>
                                <allToOneBundling>TRUE</allToOneBundling>

  <serviceMultiplexing>TRUE</serviceMultiplexing>

                            </endpointData>
                        </ciscoCeEPServiceOrderData>
                    </ciscoCeEPProvisionServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>ENDPOINT_TYPE</v12:type>
                            <v12:value>UNI</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
```

```
        </v11:subscriberRefList>
  </v11:basicInput>
  <v11:soaInput>
        <!-- Storm: ignored, but required in request for schema valid
request -->
        <v11:requestedCompletionDate>2014-10-06T00:08:15.328-07:00
        </v11:requestedCompletionDate>
        <v11:priority>0</v11:priority>
        <v11:purchaseOrder>NONE</v11:purchaseOrder>
        <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
  </v11:soaInput>
</v11:provisionRequest>

   </soapenv:Body>
</soapenv:Envelope>
```

9.49.26 UNI Service Provision SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
```

```
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>9146</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>ENDPOINT_TYPE</ns4:type>
                  <ns4:value>UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>Test UNI</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.49.27 ENNI Service Provision SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
```

```
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>

<v11:provisionRequest
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
  xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
  <v11:basicInput>
        <!--Optional: -->
        <v11:vendorExtensions>
              <!--You may enter ANY elements at this point -->
              <ciscoCeEPProvisionServiceRequest

  xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                    <ciscoCeEPServiceOrderData>
                          <serviceName>Test EP-LAN Service
1</serviceName>
                          <serviceDescription>Test EP-LANL Service 1
Description
                          </serviceDescription>
                          <enniOperationType>add</enniOperationType>

                          <endpointData>

                                <portRef>
                                      <v12:rdn>
                                            <v12:type>MD</v12:type>

  <v12:value>CISCO_EPNM</v12:value>
                                      </v12:rdn>
                                      <v12:rdn>
                                            <v12:type>ME</v12:type>
                                            <v12:value> prime-asr903-1
</v12:value>
                                      </v12:rdn>
                                      <v12:rdn>
                                            <v12:type>FTP</v12:type>
                                            <v12:value>
name=GigabitEthernet0/0/3</v12:value>
                                      </v12:rdn>
                                </portRef>

  <enniName>Test ENNI</enniName>
                                <enniDescription>Test ENNI for Service
Prov</enniDescription>
                                <portMtuSize>8000</portMtuSize>
                                <portSpeedRate>10 Mbps</portSpeedRate>

  <protectionMechanism>None</protectionMechanism>

                          </endpointData>
                    </ciscoCeEPServiceOrderData>
              </ciscoCeEPProvisionServiceRequest>
        </v11:vendorExtensions>
```

```
        <v11:productInfo>
              <v11:productName>
                    <v12:rdn>
                          <v12:type>MD</v12:type>
                          <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                          <v12:type>ENDPOINT_TYPE</v12:type>
                          <v12:value>ENNI</v12:value>
                    </v12:rdn>
              </v11:productName>
        </v11:productInfo>
        <v11:subscriberRefList>
              <v12:rdn>
                    <v12:type>MD</v12:type>
                    <v12:value>CISCO_EPNM</v12:value>
              </v12:rdn>
              <v12:rdn>
                    <v12:type>CUSTOMER</v12:type>
                    <v12:value>cvg</v12:value>
              </v12:rdn>
        </v11:subscriberRefList>
  </v11:basicInput>
  <v11:soaInput>
        <!-- Storm: ignored, but required in request for schema valid
request -->
        <v11:requestedCompletionDate>2014-10-06T00:08:15.328-07:00
        </v11:requestedCompletionDate>
        <v11:priority>0</v11:priority>
        <v11:purchaseOrder>NONE</v11:purchaseOrder>
        <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
  </v11:soaInput>
</v11:provisionRequest>

   </soapenv:Body>
</soapenv:Envelope>
```

9.49.28 ENNI Service Provision SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
```

```
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:provisionResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>9422</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>ENDPOINT_TYPE</ns4:type>
                  <ns4:value>ENNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
```

```
                        <ns4:value>CISCO_EPNM</ns4:value>
                     </ns4:rdn>
                     <ns4:rdn>
                        <ns4:type>CFS</ns4:type>
                        <ns4:value>Test ENNI</ns4:value>
                     </ns4:rdn>
                  </ns7:objectName>
               </ns5:cfsCreationEvents>
            </ns3:cfsCreation>

      </ns3:provisionResponse>
   </soap:Body>
</soap:Envelope>
```

9.50 modify – CE Services

9.50.1 CE Service EPL Modify SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
    <soapenv:Header>
        <v1:header />
    </soapenv:Header>
    <soapenv:Body>
        <v11:modifyRequest>
            <v11:basicInput>
                <v11:vendorExtensions>
                    <ciscoCeModifyServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                        <cfsRef>
                            <v12:rdn>
                                <v12:type>MD</v12:type>
                                <v12:value>CISCO_EPNM</v12:value>
                            </v12:rdn>
                            <v12:rdn>
                                <v12:type>CFS</v12:type>
                                <v12:value>EPL_Service_1</v12:value>
                            </v12:rdn>
                        </cfsRef>
                        <ciscoCeServiceOrderData>
                            <bundling>false</bundling>
                            <ccmInterval>1 sec</ccmInterval>

<ceVlanIdPreservation>true</ceVlanIdPreservation>

<ceVlanCosPreservation>true</ceVlanCosPreservation>
                            <mtuSize>1544</mtuSize>
                            <faultManagementMap />
                        </ciscoCeServiceOrderData>
                    </ciscoCeModifyServiceRequest>
                </v11:vendorExtensions>
                <v11:productInfo>
```

```
                    <v11:productName>
                        <v12:rdn>
                            <v12:type>MD</v12:type>
                            <v12:value>CISCO_EPNM</v12:value>
                        </v12:rdn>
                        <v12:rdn>
                            <v12:type>SERVICE_TYPE</v12:type>
                            <v12:value>EPL</v12:value>
                        </v12:rdn>
                    </v11:productName>
                </v11:productInfo>
                <v11:subscriberRefList>
                    <v12:rdn>
                        <v12:type>MD </v12:type>
                        <v12:value>CISCO_PRIME</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CUSTOMER</v12:type>
                        <v12:value>cvg</v12:value>
                    </v12:rdn>
                </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
                <!--ignored -->
                <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
                <v11:priority>0</v11:priority>
                <v11:purchaseOrder>NONE</v11:purchaseOrder>
                <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
            <v11:targetState>PROVISIONED_ACTIVE</v11:targetState>
        </v11:modifyRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.50.2 CE Service EPL Modify SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:modifyResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>29837</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPL_Service_1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>29838</ns5:serviceRequestRef>
            <ns5:productName>
```

```
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult>
                  <ns17:result deviceName="prime-asr903-1"
deviceId="589604">ethernet evc EPL_Service_1
interface GigabitEthernet0/0/3
  mtu 8000
  service instance 9 ethernet EPL_Service_1
    description EPL_Service_1 description
    encapsulation default
    xconnect 100.100.100.90 20 encapsulation mpls  pw-class controlWord
      mtu 1530
      exit
    exit
  exit</ns17:result>
                  <ns17:result deviceName="prime-asr9k-cluster"
deviceId="589608">interface GigabitEthernet101/0/0/7
  mtu 8000
  speed 10
  no shutdown
  exit
interface GigabitEthernet101/0/0/7.1 l2transport
  description EPL_Service_1 description
  encapsulation default
  mtu 1544
l2vpn
  xconnect group Verizon_Wireless
    p2p EPL_Service_1
      interface GigabitEthernet101/0/0/7.1
      neighbor ipv4 100.100.100.10 pw-id 20
        pw-class controlWord
        exit
      exit
    exit
  exit</ns17:result>
               </ns17:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPL_Service_1</ns4:value>
                  </ns4:rdn>
```

```
            </ns7:objectName>
         </ns5:serviceStateChangeList>
      </ns3:cfsStateChange>
   </ns3:modifyResponse>
</soap:Body>
</soap:Envelope>
```

9.50.3 CE Service EP-LAN Modify (Add Site) SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header/>
   </soapenv:Header>
   <soapenv:Body>
      <v11:modifyRequest>
         <v11:basicInput>
            <v11:vendorExtensions>
               <ciscoCeModifyServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                  <cfsRef>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>EPLAN_MyService3</v12:value>
                     </v12:rdn>
                  </cfsRef>
                  <ciscoCeServiceOrderData>

                     <serviceName>EPLAN_MyService3</serviceName>
                     <serviceDescription> EPLAN_MyService3
description</serviceDescription>
                     <bundling>false</bundling>
                     <ccmInterval>1 sec</ccmInterval>
                     <ceVlanIdPreservation>TRUE</ceVlanIdPreservation>
                     <ceVlanCosPreservation>TRUE</ceVlanCosPreservation>
                     <mtuSize>1544</mtuSize>
                     <faultManagementMap/>
                     <maxUniEndpoints>2</maxUniEndpoints>
                     <!--===== Endpoints Configuration ====-->
                     <aEndEpDataList>
                        <endpointData>
                           <uniModifyOperation>add</uniModifyOperation>
                           <portRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO_EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
```

```
                                    <v12:type>ME</v12:type>
                                    <v12:value>prime-asr9k-
cluster</v12:value>
                                 </v12:rdn>
                                 <v12:rdn>
                                    <v12:type>FTP</v12:type>
                                    <v12:value>
name=GigabitEthernet1/1/0/13</v12:value>
                                 </v12:rdn>
                              </portRef>
                              <createUni>true</createUni>
                              <uniName>eplan_x_site_my-uni-z-3</uniName>
                              <uniDescription>Some description of eplan_x_my-
uni-a-3</uniDescription>
                              <l2cpProfile>MEF EP-LAN/EP-Tree</l2cpProfile>
                              <portMtuSize>8032</portMtuSize>
                              <portSpeedRate>10 Mbps</portSpeedRate>
                              <portMode>FULL DUPLEX</portMode>

<portEnableLinkManagement>true</portEnableLinkManagement>
                              <portEnableOAM>true</portEnableOAM>
                              <vlanIdList>100</vlanIdList>
                              <primaryHub/>
                              <backupHub/>
                           </endpointData>
                        </aEndEpDataList>
                     </ciscoCeServiceOrderData>
                  </ciscoCeModifyServiceRequest>
               </v11:vendorExtensions>
               <v11:productInfo>
                  <v11:productName>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>SERVICE_TYPE</v12:type>
                        <v12:value>EP-LAN</v12:value>
                     </v12:rdn>
                  </v11:productName>
               </v11:productInfo>
               <v11:subscriberRefList>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>CUSTOMER</v12:type>
                     <v12:value>cvg</v12:value>
                  </v12:rdn>
               </v11:subscriberRefList>
            </v11:basicInput>
            <v11:soaInput>
               <!--ignored-->
               <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
```

```
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
            <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
         </v11:soaInput>
         <v11:targetState>PROVISIONED_ACTIVE</v11:targetState>
      </v11:modifyRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.50.4 CE Service EP-LAN Modify (Add Site) SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:modifyResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns15="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
```

```
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>621</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EP-LAN</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPLAN_MyService3</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>622</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EP-LAN</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult action="preview">
                  <ns17:result deviceName="prime-asr903-1"
deviceId="553553">bridge-domain 3
l2 vfi EPLAN_MyService3 manual
  vpn id 2
  bridge-domain 3
  neighbor 100.100.100.90 pw-class controlWord
ethernet evc EPLAN_MyService3
interface GigabitEthernet0/0/3
  description Some description of eplan_x_my-uni-a-4
  service instance 2 ethernet EPLAN_MyService3
    description EPLAN X MyService4 description
    encapsulation default
    bridge-domain 3
    exit
```

```
  exit</ns17:result>
                  <ns17:result deviceName="prime-asr9k-cluster"
deviceId="553554">interface GigabitEthernet1/1/0/13
  description Some description of eplan_x_my-uni-a-3
  mtu 8032
  speed 10
  no shutdown
  exit
interface GigabitEthernet1/1/0/13.4 l2transport
  description EPLAN_MyService3 description
  encapsulation default
  mtu 1544
l2vpn
  bridge group Verizon_Wireless
    bridge-domain EPLAN_MyService3
      interface GigabitEthernet1/1/0/13.4
      vfi EPLAN_X_MyService4
        neighbor 100.100.100.10 pw-id 2
          pw-class controlWord
          exit
        exit
      exit
    exit
  exit</ns17:result>
              </ns17:deployResult>
           </ns5:vendorExtensions>
           <ns5:serviceStateChangeList>
              <ns7:objectType>CFS</ns7:objectType>
              <ns7:objectName>
                 <ns4:rdn>
                    <ns4:type>MD</ns4:type>
                    <ns4:value>CISCO_EPNM</ns4:value>
                 </ns4:rdn>
                 <ns4:rdn>
                    <ns4:type>CFS</ns4:type>
                    <ns4:value>EPLAN_MyService3</ns4:value>
                 </ns4:rdn>
              </ns7:objectName>
           </ns5:serviceStateChangeList>
        </ns3:cfsStateChange>
      </ns3:modifyResponse>
   </soap:Body>
</soap:Envelope>
```

9.50.5 CE Service EP-LAN Modify (Remove Site) SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header/>
   </soapenv:Header>
   <soapenv:Body>
```

```
      <v11:modifyRequest>
         <v11:basicInput>
            <v11:vendorExtensions>
               <ciscoCeModifyServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                  <cfsRef>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>EPLAN_MyService3</v12:value>
                     </v12:rdn>
                  </cfsRef>
                  <ciscoCeServiceOrderData>

                     <aEndEpDataList>
                        <endpointData>
                          <uniModifyOperation>remove</uniModifyOperation>
                        <uniRef>
                           <v12:rdn>
                              <v12:type>MD</v12:type>
                              <v12:value>CISCO_EPNM</v12:value>
                           </v12:rdn>
                           <v12:rdn>
                              <v12:type>UNI</v12:type>
                              <v12:value>eplan_x_my-uni-a-4</v12:value>
                           </v12:rdn>
                        </uniRef>
                        </endpointData>
                     </aEndEpDataList>
                  </ciscoCeServiceOrderData>
               </ciscoCeModifyServiceRequest>
            </v11:vendorExtensions>
            <v11:productInfo>
               <v11:productName>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>EP-LAN</v12:value>
                  </v12:rdn>
               </v11:productName>
            </v11:productInfo>
            <v11:subscriberRefList>
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>CUSTOMER</v12:type>
                  <v12:value>cvg</v12:value>
               </v12:rdn>
```

```
            </v11:subscriberRefList>
         </v11:basicInput>
         <v11:soaInput>
            <!-- ignored-->
            <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
            <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
         </v11:soaInput>
         <v11:targetState>PROVISIONED_ACTIVE</v11:targetState>
      </v11:modifyRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.50.6 CE Service EP-LAN Modify (Remove Site) SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:modifyResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/omtpnr/v1"
```

```
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns15="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>639</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EP-LAN</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPLAN_MyService3</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>640</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EP-LAN</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult action="preview">
                  <ns17:result deviceName="prime-asr903-1"
deviceId="553553">ethernet evc EPLAN_MyService3
interface GigabitEthernet0/0/3
  description Some description of eplan_x_my-uni-a-4
  service instance 2 ethernet EPLAN_MyService3
    description EPLAN_MyService3 description
    encapsulation default
    bridge-domain 3
```

```
    exit
  exit</ns17:result>
              </ns17:deployResult>
           </ns5:vendorExtensions>
           <ns5:serviceStateChangeList>
              <ns7:objectType>CFS</ns7:objectType>
              <ns7:objectName>
                 <ns4:rdn>
                    <ns4:type>MD</ns4:type>
                    <ns4:value>CISCO_EPNM</ns4:value>
                 </ns4:rdn>
                 <ns4:rdn>
                    <ns4:type>CFS</ns4:type>
                    <ns4:value>EPLAN_MyService3</ns4:value>
                 </ns4:rdn>
              </ns7:objectName>
           </ns5:serviceStateChangeList>
        </ns3:cfsStateChange>
     </ns3:modifyResponse>
   </soap:Body>
</soap:Envelope>
```

9.50.7 UNI Service Modify SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:modifyRequest>
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
            <ciscoCeEPModifyServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                <cfsRef>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>Test UNI</v12:value>
                    </v12:rdn>
                </cfsRef>
                <ciscoCeEPServiceOrderData>
                          <serviceName>Test UNI</serviceName>
                          <serviceDescription>TEST UNI
Prov</serviceDescription>
```

```
                        <endpointData>

                              <portRef>
                                    <v12:rdn>
                                          <v12:type>MD</v12:type>

  <v12:value>CISCO_EPNM</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
                                          <v12:type>ME</v12:type>
                                          <v12:value>prime-asr-9k-
cluster</v12:value>
                                    </v12:rdn>
                                    <v12:rdn>
                                          <v12:type>FTP</v12:type>
                                          <v12:value>name=
GigabitEthernet1/1/0/13</v12:value>
                                    </v12:rdn>
                              </portRef>

                              <uniName>Test UNI</uniName>
                              <uniDescription>Test UNI for Service
Prov1</uniDescription>

                              <!-- -->
                              <uniBundling>false</uniBundling>
                              <portMtuSize>8000</portMtuSize>
                              <portSpeedRate>10 Mbps</portSpeedRate>
                              <portMode>FULL DUPLEX</portMode>

  <portEnableLinkManagement>true</portEnableLinkManagement>
                              <portEnableOAM>true</portEnableOAM>
                              <ceVlanId>100</ceVlanId>
                              <allToOneBundling>TRUE</allToOneBundling>

  <serviceMultiplexing>TRUE</serviceMultiplexing>

                        </endpointData>
                  </ciscoCeEPServiceOrderData>
            </ciscoCeEPModifyServiceRequest>

            </v11:vendorExtensions>
            <v11:productInfo>
               <v11:productName>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>ENDPOINT_TYPE</v12:type>
                     <v12:value>UNI</v12:value>
                  </v12:rdn>
               </v11:productName>
               <!--Optional:-->
               <!--Optional:-->
               <!--You have a CHOICE of the next 2 items at this level-->
```

```
            </v11:productInfo>
            <!--Zero or more repetitions:-->
            <v11:subscriberRefList>
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>CUSTOMER</v12:type>
                  <v12:value>cvg</v12:value>
               </v12:rdn>
            </v11:subscriberRefList>
            <!--Zero or more repetitions:-->
            <!--Zero or more repetitions:-->
         </v11:basicInput>
  <v11:soaInput>
        <!-- Storm: ignored, but required in request for schema valid
request -->
        <v11:requestedCompletionDate>2014-10-06T00:08:15.328-07:00
        </v11:requestedCompletionDate>
        <v11:priority>0</v11:priority>
        <v11:purchaseOrder>NONE</v11:purchaseOrder>
        <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
  </v11:soaInput>
      </v11:modifyRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.50.8 UNI Service Modify SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
```

```
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:modifyResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>9255</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>ENDPOINT_TYPE</ns4:type>
                  <ns4:value>UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>Test UNI</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
```

```
         </ns3:cfsCreation>
         <ns3:serviceStateTransitionFailureEvent>
            <ns8:cfsName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>Test UNI</ns4:value>
               </ns4:rdn>
            </ns8:cfsName>
         </ns3:serviceStateTransitionFailureEvent>
      </ns3:modifyResponse>
   </soap:Body>
</soap:Envelope>
```

9.50.9 ENNI Service Modify SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:modifyRequest>
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
            <ciscoCeEPModifyServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                <cfsRef>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>Test UNI</v12:value>
                    </v12:rdn>
                </cfsRef>
                <ciscoCeEPServiceOrderData>
                          <serviceName>Test ENNI</serviceName>
                          <serviceDescription>TEST ENNI SErv Prov
1</serviceDescription>
<enniOperationType>add</enniOperationType>
                          <endpointData>

                               <portRef>
                                     <v12:rdn>
                                           <v12:type>MD</v12:type>
```

```
  <v12:value>CISCO_EPNM</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                              <v12:type>ME</v12:type>
                                              <v12:value>prime-asr9k-
cluster</v12:value>
                                        </v12:rdn>
                                        <v12:rdn>
                                              <v12:type>FTP</v12:type>
                                              <v12:value>name=
GigabitEthernet1/1/0/13</v12:value>
                                        </v12:rdn>
                                  </portRef>
                                  <enniName>Test ENNI</enniName>
                                  <enniDescription>Test ENNI for Service
Prov Modified </enniDescription>
                                  <portMtuSize>8001</portMtuSize>
                                  <portSpeedRate>10 Mbps</portSpeedRate>

  <protectionMechanism>None</protectionMechanism>

                           </endpointData>
                     </ciscoCeEPServiceOrderData>
            </ciscoCeEPModifyServiceRequest>

            </v11:vendorExtensions>
            <v11:productInfo>
               <v11:productName>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>ENDPOINT_TYPE</v12:type>
                     <v12:value>ENNI</v12:value>
                  </v12:rdn>
               </v11:productName>
               <!--Optional:-->
               <!--Optional:-->
               <!--You have a CHOICE of the next 2 items at this level-->
            </v11:productInfo>
            <!--Zero or more repetitions:-->
            <v11:subscriberRefList>
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>CUSTOMER</v12:type>
                  <v12:value>cvg</v12:value>
               </v12:rdn>
            </v11:subscriberRefList>
            <!--Zero or more repetitions:-->
            <!--Zero or more repetitions:-->
         </v11:basicInput>
```

```
  <v11:soaInput>
        <!-- Storm: ignored, but required in request for schema valid
request -->
        <v11:requestedCompletionDate>2014-10-06T00:08:15.328-07:00
        </v11:requestedCompletionDate>
        <v11:priority>0</v11:priority>
        <v11:purchaseOrder>NONE</v11:purchaseOrder>
        <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
  </v11:soaInput>
      </v11:modifyRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.50.10 ENNI Service Modify SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:modifyResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
```

```
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>9438</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>ENDPOINT_TYPE</ns4:type>
                  <ns4:value>ENNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>Test ENNI</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:serviceStateTransitionFailureEvent>
            <ns8:cfsName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>Test ENNI</ns4:value>
               </ns4:rdn>
            </ns8:cfsName>
         </ns3:serviceStateTransitionFailureEvent>
      </ns3:modifyResponse>
   </soap:Body>
</soap:Envelope>
```

9.51 modify – DWDM Services

9.51.1 DWDM Service Modify SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:modifyRequest>
         <v11:basicInput>
            <v11:vendorExtensions>
                <ciscoOptModifyServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">
                <cfsRef>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>ochtrail-demo-v-1</v12:value>
                    </v12:rdn>
                </cfsRef>
                   <ciscoOptServiceOrderData>
                     <customer>"Vodafone"</customer>
                     <serviceName>ochtrail-demo-v-1</serviceName>
                     <serviceDescription>str123456</serviceDescription>

                     <operationType>ProvideService</operationType>
                     <direction>UNIDIRECTIONAL</direction>
                     <uni>true</uni>
                     <protectionType>NONE</protectionType>
                     <label>str1234</label>
                     <validation>NONE</validation>
                     <opticalThreshold>GREEN</opticalThreshold>

<opticalThresholdProtected>GREEN</opticalThresholdProtected>

<upstreamChannelPowerOffset>3.14159</upstreamChannelPowerOffset>

<downstreamChannelPowerOffset>3.14159</downstreamChannelPowerOffset>
                     <ignorePathAlarm>true</ignorePathAlarm>
                     <allowRegeneration>true</allowRegeneration>
                     <restoration>NONE</restoration>
                     <revert>AUTOMATIC</revert>
                     <soakTime>12:12:12</soakTime>
                     <priority>HIGH</priority>
```

```
                     <validationRestoration>NONE</validationRestoration>

<opticalThresholdRestoration>GREEN</opticalThresholdRestoration>

<opticalThresholdRestorationProtected>GREEN</opticalThresholdRestorationPr
otected>
                     <frequency>3.14159</frequency>
                     <width>12345</width>
                     <frequencyRequired>true</frequencyRequired>
                     <frequencyProtected>3.14159</frequencyProtected>
                     <widthProtected>3.14159</widthProtected>

<frequencyProtectedRequired>true</frequencyProtectedRequired>
                     <recordRoute>true</recordRoute>
                     <openEnd>true</openEnd>
                     <bandwidth>NONE</bandwidth>
                     <framingType>CBR</framingType>
                     <bitRate>12345</bitRate>
                     <protectionProfile>str1234</protectionProfile>
                     <aEndTpList>
                        <endpointData>
                           <portRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-225.cisco.com
</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>
                                 <v12:value>
name=Optics0/14/0/3;LR=LR_PHYSICAL_OPTICAL</v12:value>
                              </v12:rdn>
                           </portRef>
                           <role>AEND</role>
                           <localDrop>LINE-2-2-1</localDrop>
                        </endpointData>
                     </aEndTpList>
                     <zEndTpList>
                        <endpointData>
                           <portRef>
                              <v12:rdn>
                                 <v12:type>MD</v12:type>
                                 <v12:value>CISCO-EPNM</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>ME</v12:type>
                                 <v12:value>cvg-scapa-222.cisco.com
</v12:value>
                              </v12:rdn>
                              <v12:rdn>
                                 <v12:type>PTP</v12:type>
```

```
                                    <v12:value>
name=Optics0/14/0/4;LR=LR_PHYSICAL_OPTICAL</v12:value>
                                 </v12:rdn>
                              </portRef>
                              <role>ZEND</role>
                              <localDrop>LINE-2-2-1</localDrop>
                           </endpointData>
                        </zEndTpList>
                        <constraints></constraints>
                        <extendedData/>
                     </ciscoOptServiceOrderData>
                  </ciscoOptModifyServiceRequest>
               </v11:vendorExtensions>
               <v11:productInfo>
                  <v11:productName>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>SERVICE_TYPE</v12:type>
                        <v12:value>OCH-Trail</v12:value>
                     </v12:rdn>
                  </v11:productName>
                  <!--Optional:-->
                  <!--Optional:-->
                  <!--You have a CHOICE of the next 2 items at this level-->
               </v11:productInfo>
               <!--Zero or more repetitions:-->
               <v11:subscriberRefList>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>CUSTOMER</v12:type>
                     <v12:value>customer101</v12:value>
                  </v12:rdn>
               </v11:subscriberRefList>
               <!--Zero or more repetitions:-->
               <v11:userRefList>
               </v11:userRefList>
               <!--Zero or more repetitions:-->
               <v11:sapRefList>
               </v11:sapRefList>
            </v11:basicInput>
            <v11:soaInput>
               <!-- Storm: ignored, but required in request for schema valid
request -->
            <v11:requestedCompletionDate>2014-10-06T00:08:15.328-07:00
            </v11:requestedCompletionDate>
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
            <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
            </v11:soaInput>
            <v11:targetState>PROVISIONED_ACTIVE</v11:targetState>
```

```
      </v11:modifyRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.51.2 DWDM Service Modify SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:modifyResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>2757</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
```

```
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>OCHTRAIL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>ochtrail-demo-v-1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:serviceStateTransitionFailureEvent>
            <ns8:cfsName>
               <ns4:rdn>
                  <ns4:type>CFS</ns4:type>
                  <ns4:value>ochtrail-demo-v-1</ns4:value>
               </ns4:rdn>
            </ns8:cfsName>
         </ns3:serviceStateTransitionFailureEvent>
      </ns3:modifyResponse>
   </soap:Body>
</soap:Envelope>
```

9.51.3 OTN Service Modify SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:modifyRequest>
         <v11:basicInput>
            <!--Optional:-->
            <v11:vendorExtensions>
               <ciscoOptModifyServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">
                <cfsRef>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CFS</v12:type>
```

```
                        <v12:value>oduuni-test-v1</v12:value>
                     </v12:rdn>
                  </cfsRef>
                 <ciscoOptServiceOrderData>

                       <serviceName>oduuni-test-v1</serviceName>
                       <serviceDescription>str12345</serviceDescription>
                       <direction>UNIDIRECTIONAL</direction>
                       <recordRoute>true</recordRoute>
                       <openEnd>true</openEnd>
                      <otnServiceType>OTN_OPU_FLEX</otnServiceType>
                       <bandwidth>ODU1</bandwidth>
                       <framingType>GFP-F-Fixed</framingType>
                      <protectionType>ONE_PLUS_ONE</protectionType>
                       <bitRate>400</bitRate>
                       <protectionProfile>str1234</protectionProfile>
                       <aEndTpList>
                          <endpointData>
                             <portRef>
                                <v12:rdn>
                                   <v12:type>MD</v12:type>
                                   <v12:value>CISCO-EPNM</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                   <v12:type>ME</v12:type>
                                   <v12:value>cvg-228.cisco.com</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                   <v12:type>FTP</v12:type>
                                   <v12:value>
name=GigabitEthCtrlr0/5/0/0;LR=LR_DSR_Gigabit_Ethernet</v12:value>
                                </v12:rdn>
                             </portRef>
                             <role>AEND</role>
                          </endpointData>
                       </aEndTpList>
                       <zEndTpList>
                          <endpointData>
                             <portRef>
                                <v12:rdn>
                                   <v12:type>MD</v12:type>
                                   <v12:value>CISCO-EPNM</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                   <v12:type>ME</v12:type>
                                   <v12:value>cvg-235.cisco.com</v12:value>
                                </v12:rdn>
                                <v12:rdn>
                                   <v12:type>FTP</v12:type>
                                   <v12:value>
name=GigabitEthCtrlr0/5/0/3;LR=LR_DSR_Gigabit_Ethernet</v12:value>
                                </v12:rdn>
                             </portRef>
                             <role>ZEND</role>
                          </endpointData>
                       </zEndTpList>
```

```
                     <constraints/>
                     <extendedData/>
                  </ciscoOptServiceOrderData>

               </ciscoOptModifyServiceRequest>
            </v11:vendorExtensions>
            <v11:productInfo>
               <v11:productName>
                  <v12:rdn>
                     <v12:type>MD</v12:type>
                     <v12:value>CISCO_EPNM</v12:value>
                  </v12:rdn>
                  <v12:rdn>
                     <v12:type>SERVICE_TYPE</v12:type>
                     <v12:value>ODU_UNI</v12:value>
                  </v12:rdn>
               </v11:productName>
               <!--Optional:-->
               <!--Optional:-->
               <!--You have a CHOICE of the next 2 items at this level-->
            </v11:productInfo>
            <!--Zero or more repetitions:-->
            <v11:subscriberRefList>
               <v12:rdn>
                  <v12:type>MD</v12:type>
                  <v12:value>CISCO_EPNM</v12:value>
               </v12:rdn>
               <v12:rdn>
                  <v12:type>CUSTOMER</v12:type>
                  <v12:value>customer101</v12:value>
               </v12:rdn>
            </v11:subscriberRefList>
            <!--Zero or more repetitions:-->
            <!--Zero or more repetitions:-->
         </v11:basicInput>
   <v11:soaInput>
         <!-- Storm: ignored, but required in request for schema valid
request -->
         <v11:requestedCompletionDate>2014-10-06T00:08:15.328-07:00
         </v11:requestedCompletionDate>
         <v11:priority>0</v11:priority>
         <v11:purchaseOrder>NONE</v11:purchaseOrder>
         <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
   </v11:soaInput>
      </v11:modifyRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.51.4 OTN Service Modify SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
```

```
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:modifyResponse xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
         <ns3:cfsCreation>
            <ns5:serviceRequestRef>59235</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
```

```
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>ODU_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:cfsCreationEvents>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>oduuni-test-v1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:cfsCreationEvents>
         </ns3:cfsCreation>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>59248</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>ODU_UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns21:deployResult>
                  <ns21:result deviceName="cvg-frodo-234.cisco.com"
deviceId="925961">mpls traffic-eng gmpls optical-nni controller odu-Group-Te
5
  logging events lsp-status signalling-state
  logging events lsp-status switch-over
  logging events lsp-status cross-connect
  logging events lsp-status insufficient-bandwidth
  signalled-name oduuni-test-venu-v1
  signalled-bandwidth ODU1
  record-route
  static-uni ingress-port controller GigabitEthernet 0/5/0/0 egress-port
unnumbered 42
  destination ipv4 unicast 10.58.235.235
  path-option 1 DYNAMIC protected-by none lockdown
  path-protection attribute-set str1234
  exit</ns21:result>
               </ns21:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>oduuni-test-v1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
```

```
         </ns3:cfsStateChange>
      </ns3:modifyResponse>
   </soap:Body>
</soap:Envelope>
```

9.52 retrieveServiceStates – CE Services

This is a generic request that can be used to retrieve the service states of all supported service types. The service type should be specified in the ProductNameRDN for the RDN type "SERVICE_TYPE"

9.52.1 CE Service Retrieve Service States SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:retrieveServiceStatesRequest>
         <v11:rootRequest>
            <!--Optional:-->
            <v11:vendorExtensions>
               <ciscoCeRetrieveServiceStatesRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                  <cfsRef>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>EPL_Service_1</v12:value>
                     </v12:rdn>
                  </cfsRef>
               </ciscoCeRetrieveServiceStatesRequest>
            </v11:vendorExtensions>
         </v11:rootRequest>
         <v11:productName>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>SERVICE_TYPE</v12:type>
               <v12:value>EPL</v12:value>
            </v12:rdn>
         </v11:productName>
      </v11:retrieveServiceStatesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.52.2 CE Service Retrieve Service States SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:retrieveServiceStatesResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
         <ns3:cfsName>
            <ns4:rdn>
               <ns4:type>MD</ns4:type>
               <ns4:value>CISCO_EPNM</ns4:value>
            </ns4:rdn>
```

```
            <ns4:rdn>
               <ns4:type>CFS</ns4:type>
               <ns4:value>EPL_Service_1</ns4:value>
            </ns4:rdn>
         </ns3:cfsName>
         <ns3:cfsState>RESERVED</ns3:cfsState>
      </ns3:retrieveServiceStatesResponse>
   </soap:Body>
</soap:Envelope>
```

9.53 retrieveServiceStates – DWDM / OTN Services

This is a generic request that can be used to retrieve the service states of all supported service types. The service type should be specified in the ProductNameRDN for the RDN type "SERVICE_TYPE"

9.53.1 DWDM/OTN Services SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:retrieveServiceStatesRequest>
         <v11:rootRequest>
            <!--Optional:-->
            <v11:vendorExtensions>
               <ciscoOptRetrieveServiceStatesRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">
                  <cfsRef>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>ochtrail-service-1</v12:value>
                     </v12:rdn>
                  </cfsRef>
               </ciscoOptRetrieveServiceStatesRequest>
            </v11:vendorExtensions>
         </v11:rootRequest>
         <v11:productName>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>SERVICE_TYPE</v12:type>
```

```
                <v12:value>OCHTRAIL</v12:value>
             </v12:rdn>
          </v11:productName>
       </v11:retrieveServiceStatesRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.53.2 DWDM/OTN Services SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:retrieveServiceStatesResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
```

```
         <ns3:cfsName>
            <ns4:rdn>
               <ns4:type>MD</ns4:type>
               <ns4:value>CISCO_EPNM</ns4:value>
            </ns4:rdn>
            <ns4:rdn>
               <ns4:type>CFS</ns4:type>
               <ns4:value>ochtrail-service-1</ns4:value>
            </ns4:rdn>
         </ns3:cfsName>
         <ns3:cfsState>PROVISIONED_ACTIVE</ns3:cfsState>
      </ns3:retrieveServiceStatesResponse>
   </soap:Body>
</soap:Envelope>
```

9.54 terminate – DWDM/OTN Services

The terminate is a generic call that can be used to terminate any provisioned CFS. The productNameRDN should contain the correct service type value for the “SERVICE_TYPE” RDN type.

9.54.1 DWDM/OTN Service SOAP Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
<v11:terminateRequest>
    <v11:rootRequest>
        <!--Optional: -->
        <v11:vendorExtensions>
            <ciscoOptTerminateServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1">
                <cfsRef>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>ochtrail-demo-ochnc-v123</v12:value>
                    </v12:rdn>
                </cfsRef>
                <ciscoOptServiceOrderData>
                    <serviceName>Speed Domain 2</serviceName>
                </ciscoOptServiceOrderData>
            </ciscoOptTerminateServiceRequest>
        </v11:vendorExtensions>
    </v11:rootRequest>
    <v11:productName>
        <!--1 or more repetitions: -->
```

```
        <v12:rdn>
            <v12:type>SERVICE_TYPE</v12:type>
            <v12:value>OCHNC</v12:value>
        </v12:rdn>
    </v11:productName>
    <v11:soaInput>
        <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
        <v11:priority>0</v11:priority>
        <v11:purchaseOrder>NONE</v11:purchaseOrder>
        <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
    </v11:soaInput>
</v11:terminateRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.54.2 DWDM/OTN Service SOAP Response

```
    <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
       <soap:Header>
          <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
    xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
    xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
    xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
    xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
    xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
    xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
    xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
    xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
    xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
    xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
    xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
    xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
    xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
    xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
    xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
    xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
    xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
    xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
    xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
    xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
       </soap:Header>
       <soap:Body>
          <ns3:terminateResponse
    xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
    xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
    xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
    xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
    xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
    xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
    xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
    xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
    xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
    xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
    xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
    xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
    xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
```

```
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/savc/v1">
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>3207</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>OCHNC</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>ochtrail-demo-ochnc-v123</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>3208</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>OCHNC</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult/>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>ochtrail-demo-ochnc-v123</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:terminateResponse>
   </soap:Body>
</soap:Envelope>
```

9.55 terminate – CE Services

The terminate is a generic call that can be used to terminate any provisioned CFS. The productNameRDN should contain the correct service type value for the “SERVICE_TYPE” RDN type.

9.55.1 CE Service Terminate SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header/>
   </soapenv:Header>
   <soapenv:Body>
      <v11:terminateRequest>
         <v11:rootRequest>
            <v11:vendorExtensions>
               <ciscoCeTerminateServiceRequest
xmlns=" http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                  <cfsRef>
                     <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                     </v12:rdn>
                     <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>EPL_Service_1</v12:value>
                     </v12:rdn>
                  </cfsRef>
                  <ciscoCeServiceOrderData>
                     <serviceName>EPL_Service_1</serviceName>
                  </ciscoCeServiceOrderData>
               </ciscoCeTerminateServiceRequest>
            </v11:vendorExtensions>
         </v11:rootRequest>
         <v11:productName>
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
            <v12:rdn>
               <v12:type>SERVICE_TYPE</v12:type>
               <v12:value>EPL</v12:value>
            </v12:rdn>
         </v11:productName>
         <v11:soaInput>
            <!--Storm: ignored-->
            <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
            <v11:priority>0</v11:priority>
            <v11:purchaseOrder>NONE</v11:purchaseOrder>
```

```
            <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
         </v11:soaInput>
      </v11:terminateRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.55.2 CE Service Terminate SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:terminateResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns15="http://www.cisco.com/mtop/sa/xsd/sai/ext/v1"
xmlns:ns16="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns17="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns18="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns21="http://www.tmforum.org/mtop/sb/xsd/ssc/v1">
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>29827</ns5:serviceRequestRef>
```

```
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPL_Service_1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>29828</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>SERVICE_TYPE</ns4:type>
                  <ns4:value>EPL</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns17:deployResult >
                  <ns17:result deviceName="prime-asr903-1"
deviceId="589604">interface GigabitEthernet0/0/3
  mtu 8000
  exit</ns17:result>
                  <ns17:result deviceName="prime-asr9k-cluster"
deviceId="589608">interface GigabitEthernet101/0/0/7
  mtu 8000
  speed 10
  no shutdown
  exit</ns17:result>
               </ns17:deployResult>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
```

```
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>EPL_Service_1</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:terminateResponse>
   </soap:Body>
</soap:Envelope>
```

9.55.3 Terminate QOS Profile SOAP Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
<soapenv:Header>
<v1:header/>
</soapenv:Header>
<soapenv:Body>
<v11:terminateRequest>
<v11:rootRequest>
<v11:vendorExtensions>
<ciscoCeQoSProfileTerminateServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
<profileRef>
<v12:rdn>
<v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
</v12:rdn>
<v12:rdn>
<v12:type>QOS_PROFILE</v12:type>
<v12:value>MyUnitProfile</v12:value>
</v12:rdn>
</profileRef>
<ciscoCeQoSProfileOrderData>
<qosProfileName>MyUnitProfile</qosProfileName>
<applyToInterfaces>true</applyToInterfaces>
<applyToVirtual>true</applyToVirtual>
<applyToPrivate>true</applyToPrivate>
<qosOperationType>remove</qosOperationType>
<serviceCount>0</serviceCount>
</ciscoCeQoSProfileOrderData>
</ciscoCeQoSProfileTerminateServiceRequest>
</v11:vendorExtensions>
</v11:rootRequest>
<v11:productName>
<v12:rdn>
<v12:type>MD</v12:type>
<v12:value>CISCO_EPNM</v12:value>
</v12:rdn>
<v12:rdn>
<v12:type>PROFILE_TYPE</v12:type>
```

```
<v12:value>QoS_PROFILE</v12:value>
</v12:rdn>
</v11:productName>
<v11:soaInput>
<!--Storm: ignored-->
<v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
<v11:priority>0</v11:priority>
<v11:purchaseOrder>NONE</v11:purchaseOrder>
<v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
</v11:soaInput>
</v11:terminateRequest>
</soapenv:Body>
</soapenv:Envelope>
```

9.55.4 Terminate QOS Profile SOAP Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header>
<header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
</soap:Header>
<soap:Body>
<ns3:terminateResponse xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
```

```
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/sodel/v1">
<ns3:cfsStateChange>
<ns5:serviceRequestRef>3798</ns5:serviceRequestRef>
<ns5:productName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>PROFILE_TYPE</ns4:type>
<ns4:value>QoS_PROFILE</ns4:value>
</ns4:rdn>
</ns5:productName>
<ns5:serviceStateChangeList>
<ns7:objectType>CFS</ns7:objectType>
<ns7:objectName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>CFS</ns4:type>
<ns4:value>MyQoSProfile</ns4:value>
</ns4:rdn>
</ns7:objectName>
</ns5:serviceStateChangeList>
</ns3:cfsStateChange>
<ns3:cfsStateChange>
<ns5:serviceRequestRef>3799</ns5:serviceRequestRef>
<ns5:productName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>PROFILE_TYPE</ns4:type>
<ns4:value>QoS_PROFILE</ns4:value>
</ns4:rdn>
</ns5:productName>
<ns5:vendorExtensions>
<ns21:deployResult/>
```

```
</ns5:vendorExtensions>
<ns5:serviceStateChangeList>
<ns7:objectType>CFS</ns7:objectType>
<ns7:objectName>
<ns4:rdn>
<ns4:type>MD</ns4:type>
<ns4:value>CISCO_EPNM</ns4:value>
</ns4:rdn>
<ns4:rdn>
<ns4:type>CFS</ns4:type>
<ns4:value>MyQoSProfile</ns4:value>
</ns4:rdn>
</ns7:objectName>
</ns5:serviceStateChangeList>
</ns3:cfsStateChange>
</ns3:terminateResponse>
</soap:Body>
</soap:Envelope>
```

9.55.5 Terminate UNI / ENNI Service SOAP Request

The ENDPOINT_TYPE in product name should indicate if it is UNI or ENNI.

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
<v11:terminateRequest>
    <v11:rootRequest>
        <!--Optional: -->
        <v11:vendorExtensions>
            <ciscoCeEPTerminateServiceRequest
xmlns="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1">
                <cfsRef>
                    <v12:rdn>
                        <v12:type>MD</v12:type>
                        <v12:value>CISCO_EPNM</v12:value>
                    </v12:rdn>
                    <v12:rdn>
                        <v12:type>CFS</v12:type>
                        <v12:value>Test UNI</v12:value>
                    </v12:rdn>
                </cfsRef>
                <ciscoCeEPServiceOrderData>
                          <serviceName>Test UNI Service 1</serviceName>
                          <serviceDescription>Test UNI Srvice 1
Description</serviceDescription>
                          <removeUni>SELECTED</removeUni>
              </ciscoCeEPServiceOrderData>
            </ciscoCeEPTerminateServiceRequest>
```

```
        </v11:vendorExtensions>
    </v11:rootRequest>
    <v11:productName>
        <!--1 or more repetitions: -->
                <v12:rdn>
            <v12:type>MD</v12:type>
            <v12:value>CISCO_EPNM</v12:value>
        </v12:rdn>
        <v12:rdn>
            <v12:type>ENDPOINT_TYPE</v12:type>
            <v12:value>UNI</v12:value>
        </v12:rdn>
    </v11:productName>
    <v11:soaInput>
        <v11:requestedCompletionDate>2014-10-06T00:08:15.328-
07:00</v11:requestedCompletionDate>
        <v11:priority>0</v11:priority>
        <v11:purchaseOrder>NONE</v11:purchaseOrder>
        <v11:validFor>2014-10-06T00:08:15.328-07:00</v11:validFor>
    </v11:soaInput>
</v11:terminateRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.55.6 Terminate UNI / ENNI Service SOAP Response

The ENDPOINT_TYPE in product name will indicate if it is UNI or ENNI.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
```

```
   </soap:Header>
   <soap:Body>
      <ns3:terminateResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns8="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns16="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns17="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns18="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns19="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns20="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/opt/v1"
xmlns:ns21="http://www.cisco.com/epnm/mtop/sa/xsd/sai/ext/ce/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns23="http://www.tmforum.org/mtop/sb/xsd/ssc/v1"
xmlns:ns24="http://www.tmforum.org/mtop/sb/xsd/sodel/v1"
xmlns:ns25="http://www.tmforum.org/mtop/sb/xsd/savc/v1"
xmlns:ns26="http://www.tmforum.org/mtop/sb/xsd/soc/v1">
         <ns3:cfsStateChange>
            <ns5:serviceRequestRef>9274</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>ENDPOINT_TYPE</ns4:type>
                  <ns4:value>UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>Test UNI</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
         <ns3:cfsStateChange>
```

```
            <ns5:serviceRequestRef>9275</ns5:serviceRequestRef>
            <ns5:productName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>ENDPOINT_TYPE</ns4:type>
                  <ns4:value>UNI</ns4:value>
               </ns4:rdn>
            </ns5:productName>
            <ns5:vendorExtensions>
               <ns21:deployResult/>
            </ns5:vendorExtensions>
            <ns5:serviceStateChangeList>
               <ns7:objectType>CFS</ns7:objectType>
               <ns7:objectName>
                  <ns4:rdn>
                     <ns4:type>MD</ns4:type>
                     <ns4:value>CISCO_EPNM</ns4:value>
                  </ns4:rdn>
                  <ns4:rdn>
                     <ns4:type>CFS</ns4:type>
                     <ns4:value>Test UNI</ns4:value>
                  </ns4:rdn>
               </ns7:objectName>
            </ns5:serviceStateChangeList>
         </ns3:cfsStateChange>
      </ns3:terminateResponse>
   </soap:Body>
</soap:Envelope>
```

9.56 Alarm Retrieval

9.56.1 getActiveAlarms

9.56.1.1 *SOAP Request*

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/rtm/xsd/ar/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:v14="http://www.tmforum.org/mtop/nra/xsd/prc/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getActiveAlarmsRequest>

      </v11:getActiveAlarmsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.56.1.2 *SOAP Response*

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/rtm/xsd/ar/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <requestedBatchSize>100</requestedBatchSize>
         <batchSequenceNumber>1</batchSequenceNumber>
         <batchSequenceEndOfReply>true</batchSequenceEndOfReply>
      </header>
   </soap:Header>
   <soap:Body>
      <ns3:getActiveAlarmsResponse
xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/rtm/xsd/ar/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <ns9:alarm>
            <ns7:notificationId>1528539</ns7:notificationId>
            <ns7:vendorExtensions>
               <ns14:ciscoAlarmExtension>
                  <ns14:lastUpdatedAt>2015-07-30T10:02:13.260-
07:00</ns14:lastUpdatedAt>
                  <ns14:ntty7address>10. 58.229. 73</ns14:ntty7address>
                  <ns14:deviceName>SMR9-73 CHAN-5-4-1</ns14:deviceName>
                  <ns14:affectedObjectName>CHAN-5-4-
1</ns14:affectedObjectName>
               </ns14:ciscoAlarmExtension>
            </ns7:vendorExtensions>
```

```
            <ns8:objectName>
               <ns4:rdn>
                  <ns4:type>MD</ns4:type>
                  <ns4:value>CISCO_EPNM</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>ME</ns4:type>
                  <ns4:value>SMR9-73</ns4:value>
               </ns4:rdn>
               <ns4:rdn>
                  <ns4:type>CTP</ns4:type>
                  <ns4:value>name=CHAN-5-4-
1;LR=LR_OPTICAL_SECTION</ns4:value>
               </ns4:rdn>
            </ns8:objectName>
            <ns8:osTime>2015-07-30T10:02:13.260-07:00</ns8:osTime>
            <ns9:aliasNameList>
               <ns2:alias>
                  <ns2:aliasName>ObjectDisplayName</ns2:aliasName>
                  <ns2:aliasValue>CHAN-5-4-1</ns2:aliasValue>
               </ns2:alias>
            </ns9:aliasNameList>
            <ns9:probableCause qualifier="1528539" extension="SIGLOSS">
               <ns6:probableCause>VENDOR_EXT</ns6:probableCause>
            </ns9:probableCause>
            <ns9:nativeProbableCause>SIGLOSS</ns9:nativeProbableCause>
            <ns9:additionalText>Signal Loss on Data
Interface</ns9:additionalText>
            <ns9:perceivedSeverity>MAJOR</ns9:perceivedSeverity>
            <ns9:serviceAffecting>SERVICE_AFFECTING</ns9:serviceAffecting>
     <ns9:acknowledgeIndication>UNACKNOWLEDGED</ns9:acknowledgeIndication>
         </ns9:alarm>
      </ns3:getActiveAlarmsResponse>
   </soap:Body>
</soap:Envelope>
```

9.56.2 getActiveAlarmsCount

9.56.2.1 *SOAP Request*

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/rtm/xsd/ar/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:v14="http://www.tmforum.org/mtop/nra/xsd/prc/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:getActiveAlarmsCountRequest>

      </v11:getActiveAlarmsCountRequest>
   </soapenv:Body>
```

```
</soapenv:Envelope>
```

9.56.2.2 *SOAP Response*

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/rtm/xsd/ar/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:getActiveAlarmsCountResponse
xmlns:ns17="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns14="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns3="http://www.tmforum.org/mtop/rtm/xsd/ar/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
         <ns3:activeAlarmCount>51</ns3:activeAlarmCount>
      </ns3:getActiveAlarmsCountResponse>
   </soap:Body>
</soap:Envelope>
```

9.57 ConnectionControl

9.57.1 switchRoute

9.57.1.1 *SOAP Request*

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
```

```
xmlns:v11="http://www.tmforum.org/mtop/rp/xsd/conc/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v13="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:v14="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:v15="http://www.tmforum.org/mtop/fmw/xsd/gen/v1">
   <soapenv:Header>
      <v1:header>
         <!--Optional:-->

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:switchRouteRequest>
         <!--Optional:-->
         <v11:sncRef>
            <!--1 or more repetitions:-->
            <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
           <v12:rdn>
               <v12:type>CFS</v12:type>
               <v12:value>322363</v12:value>
            </v12:rdn>

         </v11:sncRef>
         <!--Optional:-->
         <v11:routeId>?</v11:routeId>
         <!--Optional:-->
         <v11:tolerableImpact>?</v11:tolerableImpact>
         <!--Optional:-->
         <v11:osFreedomLevel>?</v11:osFreedomLevel>
         <!--Optional:-->
         <v11:tpDataListToModify>
            <!--Zero or more repetitions:-->
            <v13:tpData>
               <v13:tpRef>
                  <!--1 or more repetitions:-->
                  <v12:rdn>
                     <v12:type>?</v12:type>
                     <v12:value>?</v12:value>
                  </v12:rdn>
               </v13:tpRef>
               <!--Optional:-->
               <v13:tpMappingMode>?</v13:tpMappingMode>
               <!--Optional:-->
               <v14:transmissionParametersList>
                  <!--Zero or more repetitions:-->
                  <v14:transmissionParameters>
                     <!--Optional:-->
                     <v14:layerRate extension="?">?</v14:layerRate>
                     <!--Optional:-->
                     <v14:parameterList>
                        <!--Zero or more repetitions:-->
                        <v15:nvs>
                           <v15:name>?</v15:name>
```

```
                        <v15:value>?</v15:value>
                     </v15:nvs>
                  </v14:parameterList>
                  <!--Optional:-->
                  <v14:vendorExtensions>
                     <!--You may enter ANY elements at this point-->
                  </v14:vendorExtensions>
               </v14:transmissionParameters>
            </v14:transmissionParametersList>
            <!--Optional:-->
            <v13:ingressTmdRef>
               <!--1 or more repetitions:-->
               <v12:rdn>
                  <v12:type>?</v12:type>
                  <v12:value>?</v12:value>
               </v12:rdn>
            </v13:ingressTmdRef>
            <!--Optional:-->
            <v13:egressTmdRef>
               <!--1 or more repetitions:-->
               <v12:rdn>
                  <v12:type>?</v12:type>
                  <v12:value>?</v12:value>
               </v12:rdn>
            </v13:egressTmdRef>
         </v13:tpData>
      </v11:tpDataListToModify>
      <!--Optional:-->
      <v11:vendorExtensions>
         <!--You may enter ANY elements at this point-->
      </v11:vendorExtensions>
   </v11:switchRouteRequest>
</soapenv:Body>
</soapenv:Envelope>
```

9.57.1.2 *SOAP Response*

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns36="http://www.tmforum.org/mtop/fmw/xsd/comd/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/routedes/v1"
xmlns:ns28="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns27="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
```

```
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/rp/xsd/tpc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/crcd/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/cocd/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/crmd/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cosd/v1"
xmlns:ns4="http://www.tmforum.org/mtop/rp/xsd/conc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:switchRouteResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/rp/xsd/conc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cosd/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/crmd/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/cocd/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/crcd/v1"
xmlns:ns14="http://www.tmforum.org/mtop/rp/xsd/tpc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns27="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns28="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/routedes/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
```

```
xmlns:ns35="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns36="http://www.tmforum.org/mtop/fmw/xsd/comd/v1">
         <ns4:vendorExtensions>
            <ns30:ciscoConnectionControlManualRevert>
               <ns30:sncRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CFS</ns3:type>
                     <ns3:value>322363</ns3:value>
                  </ns3:rdn>
               </ns30:sncRef>
               <ns30:commandResponse>
                  <ns30:controlCommand>OPR-CPS::CHAN-2-13-5-RX&amp;amp;CHAN-2-
12-5-TX:ctag:::ACTION=MANRVRT;</ns30:controlCommand>
                  <ns30:controlCommandMessage>Service Successfully
Restored</ns30:controlCommandMessage>

<ns30:controlCommandResult>true</ns30:controlCommandResult>
                  <ns30:controlDevice>10.58.236.108</ns30:controlDevice>
               </ns30:commandResponse>
</ns30:ciscoConnectionControlManualRevert>
         </ns4:vendorExtensions>
      </ns4:switchRouteResponse>
   </soap:Body>
</soap:Envelope>
```

9.57.2 setIntendedRoute

9.57.2.1 *SOAP Request*

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/rp/xsd/conc/v1"
xmlns:v12="http://www.tmforum.org/mtop/fmw/xsd/nam/v1">
   <soapenv:Header>
      <v1:header>

      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:setIntendedRouteRequest>
         <!--Optional:-->
         <v11:sncRef>
            <!--1 or more repetitions:-->
           <v12:rdn>
               <v12:type>MD</v12:type>
               <v12:value>CISCO_EPNM</v12:value>
            </v12:rdn>
           <v12:rdn>
               <v12:type>CFS</v12:type>
               <v12:value>322363</v12:value>
            </v12:rdn>
```

```
         </v11:sncRef>
         <!--Optional:-->
         <v11:routeId>?</v11:routeId>
         <!--Optional:-->
         <v11:vendorExtensions>
            <!--You may enter ANY elements at this point-->
         </v11:vendorExtensions>
      </v11:setIntendedRouteRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.57.2.2 *SOAP Response*

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">

   <soap:Header>
      <header xmlns:ns36="http://www.tmforum.org/mtop/fmw/xsd/comd/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/routedes/v1"
xmlns:ns28="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns27="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/rp/xsd/tpc/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/crcd/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/cocd/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/crmd/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cosd/v1"
xmlns:ns4="http://www.tmforum.org/mtop/rp/xsd/conc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:setIntendedRouteResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
```

```
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/rp/xsd/conc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cosd/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/crmd/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/cocd/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/crcd/v1"
xmlns:ns14="http://www.tmforum.org/mtop/rp/xsd/tpc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns27="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns28="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/routedes/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns33="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns36="http://www.tmforum.org/mtop/fmw/xsd/comd/v1">
         <ns4:vendorExtensions>
            <ns30:ciscoConnectionControlUpgradeRestore>
               <ns30:sncRef>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>CFS</ns3:type>
                     <ns3:value>322363</ns3:value>
                  </ns3:rdn>
               </ns30:sncRef>
               <ns30:commandResponse>
                  <ns30:controlCommand>OPR-CPS::CHAN-2-13-12-RX&amp;amp;CHAN-
2-12-12-TX:ctag:::ACTION=UPGRADE;</ns30:controlCommand>
                  <ns30:controlCommandMessage>Service Successfully
Restored</ns30:controlCommandMessage>

<ns30:controlCommandResult>true</ns30:controlCommandResult>
                  <ns30:controlDevice>10.58.236.108</ns30:controlDevice>
               </ns30:commandResponse>
            </ns30:ciscoConnectionControlUpgradeRestore>
```

```
         </ns4:vendorExtensions>
      </ns4:setIntendedRouteResponse>
   </soap:Body>
</soap:Envelope>
```

9.58 TerminationPointControl

9.58.1 setTerminationPointData

9.58.1.1 *SOAP Request*

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/rp/xsd/tpc/v1"
xmlns:v12="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:v13="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v14="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:v15="http://www.tmforum.org/mtop/fmw/xsd/gen/v1">
   <soapenv:Header>
 <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:setTerminationPointDataRequest>
         <!--Optional:-->
         <v11:tpData>
            <v12:tpRef>
               <!--1 or more repetitions:-->
               <v13:rdn>
                  <v13:type>MD</v13:type>
                  <v13:value>CISCO_EPNM</v13:value>
               </v13:rdn>
               <v13:rdn>
                  <v13:type>ME</v13:type>
                  <v13:value>210213</v13:value>
               </v13:rdn>
              <v13:rdn>
                  <v13:type>PTP</v13:type>
                  <v13:value>677419</v13:value>
               </v13:rdn>

            </v12:tpRef>

            <!--Optional:-->
            <v14:transmissionParametersList>
               <!--Zero or more repetitions:-->
               <v14:transmissionParameters>
                  <!--Optional:-->
                  <v14:layerRate>LR_PHYSICAL_OPTICAL</v14:layerRate>
                  <!--Optional:-->
                  <v14:parameterList>
                     <!--Zero or more repetitions:-->
                     <v15:nvs>
                        <v15:name>adminState</v15:name>
                        <v15:value>DOWN</v15:value>
```

```
                    </v15:nvs>
                    <v15:nvs>
                       <v15:name>loopBack</v15:name>
                       <v15:value>OTHER</v15:value>
                    </v15:nvs>
                 </v14:parameterList>

              </v14:transmissionParameters>
<!--   Parameters for ODU Channelization -->
            <v14:transmissionParameters>
                 <!--Optional:-->
                 <v14:layerRate>LR_PHYSICAL_OPTICAL</v14:layerRate>
                 <!--Optional:-->
                 <v14:parameterList>
                    <!--Zero or more repetitions:-->
                    <v15:nvs>
                       <v15:name>oduNumber</v15:name>
                       <v15:value>ODU1</v15:value>
                    </v15:nvs>
                    <v15:nvs>
                       <v15:name>TPN</v15:name>
                       <v15:value>2</v15:value>
                    </v15:nvs>
                    <!-- 1 - 8 -->
                    <v15:nvs>
                       <v15:name>timeSlot</v15:name>
                       <v15:value>1</v15:value>
                    </v15:nvs>

                 </v14:parameterList>

              </v14:transmissionParameters>
<!--   Parameters for PortMode Settings -->
            <v14:transmissionParameters>
                 <!--Optional:-->
                 <v14:layerRate>LR_PHYSICAL_OPTICAL</v14:layerRate>
                 <!--Optional:-->
                 <v14:parameterList>
                    <!--Zero or more repetitions:-->
                    <v15:nvs>
                       <v15:name>portMode</v15:name>
                       <v15:value>BREAKOUT</v15:value>
                    </v15:nvs>
                    <v15:nvs>
                       <v15:name>framing</v15:name>
                       <v15:value>NONE</v15:value>
                    </v15:nvs>
                    <!-- 1 - 8 -->
                    <v15:nvs>
                       <v15:name>mapping</v15:name>
                       <v15:value>NONE</v15:value>
                    </v15:nvs>
                   <v15:nvs>
                       <v15:name>rate</v15:name>
                       <v15:value>NONE</v15:value>
                    </v15:nvs>
```

```
                    <v15:nvs>
                        <v15:name>bitRate</v15:name>
                        <v15:value>0</v15:value>
                     </v15:nvs>
                  </v14:parameterList>

               </v14:transmissionParameters>
<!--   Parameters for BREAKOUT PortMode Settings -->
            <v14:transmissionParameters>
                  <!--Optional:-->
                  <v14:layerRate>LR_PHYSICAL_OPTICAL</v14:layerRate>
                  <!--Optional:-->
                  <v14:parameterList>
                     <!--Zero or more repetitions:-->
                     <v15:nvs>
                        <v15:name>portMode</v15:name>
                        <v15:value>ETHERNET</v15:value>
                     </v15:nvs>
                     <v15:nvs>
                        <v15:name>framing</v15:name>
                        <v15:value>OPU1</v15:value>
                     </v15:nvs>
                     <!-- 1 - 8 -->
                     <v15:nvs>
                        <v15:name>mapping</v15:name>
                        <v15:value>BMP</v15:value>
                     </v15:nvs>
                    <v15:nvs>
                        <v15:name>rate</v15:name>
                        <v15:value>OC3</v15:value>
                     </v15:nvs>
                    <v15:nvs>
                        <v15:name>bitRate</v15:name>
                        <v15:value>111</v15:value>
                     </v15:nvs>
                    <v15:nvs>
                        <v15:name>laneNumber</v15:name>
                        <v15:value>1</v15:value>
                     </v15:nvs>
                  </v14:parameterList>

               </v14:transmissionParameters>

<!--   Parameters for BREAKOUT PortMode Settings -->
            <v14:transmissionParameters>
                  <!--Optional:-->
                  <v14:layerRate>LR_PHYSICAL_OPTICAL</v14:layerRate>
                  <!--Optional:-->
                  <v14:parameterList>
                     <!--Zero or more repetitions:-->
                     <v15:nvs>
                        <v15:name>portMode</v15:name>
                        <v15:value>ETHERNET</v15:value>
                     </v15:nvs>
                     <v15:nvs>
                        <v15:name>framing</v15:name>
```

```
                        <v15:value>OPU1</v15:value>
                     </v15:nvs>
                     <!-- 1 - 8 -->
                     <v15:nvs>
                        <v15:name>mapping</v15:name>
                        <v15:value>BMP</v15:value>
                     </v15:nvs>
                    <v15:nvs>
                        <v15:name>rate</v15:name>
                        <v15:value>OC3</v15:value>
                     </v15:nvs>
                    <v15:nvs>
                        <v15:name>bitRate</v15:name>
                        <v15:value>111</v15:value>
                     </v15:nvs>
                    <v15:nvs>
                        <v15:name>laneNumber</v15:name>
                        <v15:value>2</v15:value>
                     </v15:nvs>
                  </v14:parameterList>

               </v14:transmissionParameters>
            </v14:transmissionParametersList>
            <!--Optional:-->

         </v11:tpData>
      </v11:setTerminationPointDataRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.58.1.2 *SOAP Response*

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">

   <soap:Header>
      <header xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/crcd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/cocd/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/cosd/v1"
xmlns:ns18="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns17="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
```

```
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns4="http://www.tmforum.org/mtop/rp/xsd/tpc/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns4:setTerminationPointDataResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/rp/xsd/tpc/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns17="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns18="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns19="http://www.tmforum.org/mtop/fmw/xsd/cosd/v1"
xmlns:ns20="http://www.tmforum.org/mtop/fmw/xsd/cocd/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrb/xsd/crcd/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/tp/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/msi/xsd/olir/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
         <ns4:modifiedTp>
            <ns16:ptp>
               <ns5:name>
                  <ns3:rdn>
                     <ns3:type>MD</ns3:type>
                     <ns3:value>CISCO_EPNM</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>ME</ns3:type>
                     <ns3:value>210213</ns3:value>
                  </ns3:rdn>
                  <ns3:rdn>
                     <ns3:type>PTP</ns3:type>
                     <ns3:value>677419</ns3:value>
                  </ns3:rdn>
```

```
                </ns5:name>
                <ns5:discoveredName>VFAC-3-5-6-1</ns5:discoveredName>
                <ns5:vendorExtensions>
                   <ns25:ciscoPtpExtension>
                      <ns25:isPromiscuous>false</ns25:isPromiscuous>
                      <ns25:adminStatus>DOWN</ns25:adminStatus>
                      <ns25:operStatus>DOWN</ns25:operStatus>
                      <ns25:ifIndex>VFAC-3-5-6-1</ns25:ifIndex>
                      <ns25:locationIndex>0</ns25:locationIndex>
                      <ns25:isSpanMonitored>false</ns25:isSpanMonitored>
                      <ns25:isFloatingPep>false</ns25:isFloatingPep>
                      <ns25:alsSetting>
                         <ns25:alsMode>DISABLED</ns25:alsMode>

<ns25:recoveryPulseDuration>100.0</ns25:recoveryPulseDuration>

<ns25:recoveryPulseInterval>300.0</ns25:recoveryPulseInterval>
                      </ns25:alsSetting>
                      <ns25:otnPepSettings>
                         <ns25:gcc0>false</ns25:gcc0>
                         <ns25:fecMode>STANDARD</ns25:fecMode>

<ns25:syncMessagingStatus>false</ns25:syncMessagingStatus>

<ns25:signalDegradeBERThreshold>E_7</ns25:signalDegradeBERThreshold>
                      </ns25:otnPepSettings>
                      <ns25:opticalLoopbackSettings>
                         <ns25:loopback>NO_LOOPBACK</ns25:loopback>
                      </ns25:opticalLoopbackSettings>
                      <ns25:opticalTransponderSettings>
                         <ns25:g709>true</ns25:g709>
                      </ns25:opticalTransponderSettings>
                      <ns25:opticalTimingSettings>
                         <ns25:adminSSM>STU</ns25:adminSSM>
                      </ns25:opticalTimingSettings>
                      <ns25:setTPAttributeResultListExtension>
                         <ns25:attributeResultType>

<ns25:attributeName>adminStatusValue</ns25:attributeName>

<ns25:operationResult>SUCCESS</ns25:operationResult>
                               <ns25:operationMessage>ED-OTU1::VFAC-3-5-6-
1:123:::CMDMDE=FRCD:locked,disabled;</ns25:operationMessage>
                         </ns25:attributeResultType>
                         <ns25:attributeResultType>

<ns25:attributeName>loopback</ns25:attributeName>

<ns25:operationResult>FAILURE</ns25:operationResult>

<ns25:operationMessage>com.cisco.xmp.config.impl.log.XMPConfigCheckedExcep
tion: Failed to get commands corresponding to passed-in
ConfigSpecification.-CONFIG_048</ns25:operationMessage>
                         </ns25:attributeResultType>
                      </ns25:setTPAttributeResultListExtension>
                   </ns25:ciscoPtpExtension>
```

```
                </ns5:vendorExtensions>
                <ns6:resourceState>NON_WORKING</ns6:resourceState>
                <ns9:transmissionParametersList>
                   <ns9:transmissionParameters>
                      <ns9:layerRate>LR_PHYSICAL_OPTICAL</ns9:layerRate>
                   </ns9:transmissionParameters>
                </ns9:transmissionParametersList>
             </ns16:ptp>
          </ns4:modifiedTp>
       </ns4:setTerminationPointDataResponse>
   </soap:Body>
</soap:Envelope>
```

9.59 Notification

9.59.1 Subscribe Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:subscribeRequest>

<v11:consumerEpr>http://10.65.66.90:8088/nbiNotifications</v11:consumerEpr
>
         <!--Optional:-->
         <v11:topic>SERVICE_NOTIFICATION</v11:topic>
      </v11:subscribeRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.59.2 Subscribe Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:subscribeResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
```

```
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/avc/v1">

<ns3:subscriptionID>http://10.65.66.90:8088/nbiNotificationsSERVICE_NOTIFI
CATION</ns3:subscriptionID>
      </ns3:subscribeResponse>
   </soap:Body>
</soap:Envelope>
```

9.59.3 UnSubscribe Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1">
   <soapenv:Header>
      <v1:header></v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:unsubscribeRequest>
<v11:subscriptionID>http://10.65.66.90:8088/nbiNotificationsSERVICE_NOTIFI
CATION</v11:subscriptionID>
      </v11:unsubscribeRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.59.4 UnSubscribe Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns3:unsubscribeResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
```

```
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"/>
   </soap:Body>
</soap:Envelope>
```

9.60 Notification Samples

9.60.1 Equipment Add

```
<soap:Envelope
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"><soap:Header><header
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns31="http://www.cisco.com/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns29="http://www.cisco.com/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns28="http://www.cisco.com/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns24="http://www.cisco.com/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns23="http://www.cisco.com/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.cisco.com/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
<msgType>NOTIFICATION</msgType></header>
</soap:Header><soap:Body><ns3:notify
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
```

```
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/cc/v1">
<ns3:message>
<ns4:commonEventInformation xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:type="ns8:ObjectCreationType">
<ns4:sourceTime>2014-10-06T21:03:28.500+05:30</ns4:sourceTime>
<ns5:objectType>EQ</ns5:objectType>
<ns5:objectName>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>ME</ns6:type>
<ns6:value>2001003</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>EQ</ns6:type>
<ns6:value>2010207</ns6:value>
</ns6:rdn>
</ns5:objectName>
<ns5:osTime>2014-10-06T21:03:28.500+05:30</ns5:osTime>
<ns8:object>
<ns25:eq>
<ns11:name>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>ME</ns6:type>
<ns6:value>2001003</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>EQ</ns6:type>
<ns6:value>2010207</ns6:value>
```

```
</ns6:rdn>
</ns11:name>
<ns11:discoveredName>Fan2</ns11:discoveredName>
<ns11:vendorExtensions>
<ns23:ciscoEquipmentExtension>
<ns23:equipmentId>2010207</ns23:equipmentId>
<ns23:name>Fan2</ns23:name>
<ns23:description>High Speed Fan2 Module for A901-12C-FT-D</ns23:description>
<ns23:vendorEquipmentType>cevModuleCrs1FanCtrllrLC</ns23:vendorEquipmentType>
<ns23:isReportingAlarmsAllowed>UNKNOWN</ns23:isReportingAlarmsAllowed>
<ns23:serviceState>UNKNOWN</ns23:serviceState>
<ns23:serialNumber>33-0629-01</ns23:serialNumber>
<ns23:equipmentType>FAN</ns23:equipmentType>
<ns23:isFRUable>FALSE</ns23:isFRUable>
<ns23:manufacturer>Cisco</ns23:manufacturer>
<ns23:partNumber>FAN</ns23:partNumber>
<ns23:entPhysicalIndex>29</ns23:entPhysicalIndex>
<ns23:entPhysicalContainedIn>3</ns23:entPhysicalContainedIn>
</ns23:ciscoEquipmentExtension>
</ns11:vendorExtensions>
<ns25:isReportingAlarms>false</ns25:isReportingAlarms>
<ns25:expectedEquipmentObjectType>cevModuleCrs1FanCtrllrLC</ns25:expectedEqui
pmentObjectType>
<ns25:installedEquipmentObjectType>FAN</ns25:installedEquipmentObjectType>
<ns25:installedPartNumber>FAN</ns25:installedPartNumber>
<ns25:installedSerialNumber>33-0629-01</ns25:installedSerialNumber>
<ns25:resourceFulfillmentState>SERV_NA</ns25:resourceFulfillmentState>
<ns25:manufacturer>Cisco</ns25:manufacturer>
</ns25:eq>
</ns8:object>
</ns4:commonEventInformation>
</ns3:message>
</ns3:notify>
</soap:Body>
</soap:Envelope>
```

9.60.2 ManagedElement Delete

```
<soap:Envelope
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"><soap:Header><header
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
```

```
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"><msgType>NOTIFICATION</msg
Type></header></soap:Header><soap:Body><ns3:notify
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/cc/v1">
<ns3:message>
<ns4:commonEventInformation xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns34="http://www.tmforum.org/mtop/fmw/xsd/odel/v1"
xsi:type="ns34:ObjectDeletionType">
<ns4:sourceTime>2014-10-07T17:12:18.948+05:30</ns4:sourceTime>
<ns5:objectType>ME</ns5:objectType>
<ns5:objectName>
<ns6:rdn>
```

```
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>ME</ns6:type>
<ns6:value>2375403</ns6:value>
</ns6:rdn>
</ns5:objectName>
<ns5:osTime>2014-10-07T17:12:18.948+05:30</ns5:osTime>
</ns4:commonEventInformation>
</ns3:message>
</ns3:notify>
</soap:Body>
</soap:Envelope>
```

9.60.3 Equipment Update

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header>
<header xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
<msgType>NOTIFICATION</msgType>
</header>
</soap:Header>
<soap:Body>
<ns3:notify xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
```

```
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns26="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/cc/v1">
<ns3:message>
<ns4:commonEventInformation                                                    xm
lns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns9:AttributeValueChangeType">
<ns4:sourceTime>2014-10-15T00:28:46.708-07:00</ns4:sourceTime>
<ns5:objectType>EQ</ns5:objectType>
<ns5:objectName>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>ME</ns6:type>
<ns6:value>841841</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>EQ</ns6:type>
<ns6:value>851851</ns6:value>
</ns6:rdn>
</ns5:objectName>
<ns5:osTime>2014-10-15T00:28:46.708-07:00</ns5:osTime>
<ns9:attributeList>
<ns25:eq>
<ns11:name>
<ns6:rdn>
<ns6:type>MD</ns6:type>
```

```
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>ME</ns6:type>
<ns6:value>841841</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>EQ</ns6:type>
<ns6:value>851851</ns6:value>
</ns6:rdn>
</ns11:name>
<ns25:isReportingAlarms>false</ns25:isReportingAlarms>
<ns25:resourceFulfillmentState>SERV_NA</ns25:resourceFulfillmentState>
</ns25:eq>
</ns9:attributeList>
</ns4:commonEventInformation>
</ns3:message>
</ns3:notify>
</soap:Body>
</soap:Envelope>
```

9.60.4 SubNetworkConnection - Attribute Value Change

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header>
<header xmlns:ns60="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/fdnvc/v1"
xmlns:ns59="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns58="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1"
xmlns:ns57="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns56="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns55="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns54="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns53="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns52="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns51="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns50="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns49="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns48="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns47="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns46="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns45="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns44="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns43="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns42="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns40="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns39="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns38="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns36="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns35="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns34="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
```

```
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
<msgType>NOTIFICATION</msgType>
</header>
</soap:Header>
<soap:Body>
<ns3:notify xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns12="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns13="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns17="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tppool/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/ctp/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrf/xsd/gtp/v1"
xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
```

```
xmlns:ns24="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns25="http://www.tmforum.org/mtop/nrf/xsd/mlsn/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns29="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns31="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns34="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns35="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns36="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns38="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns39="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns40="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns42="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns43="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns44="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns45="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns46="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns47="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns48="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns49="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns50="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns51="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns52="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns53="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns54="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns55="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns56="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns57="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns58="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1"
xmlns:ns59="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns60="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/fdnvc/v1">
<ns3:message>
<ns4:commonEventInformation xsi:type="ns55:AttributeValueChangeType"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<ns4:notificationId>1440116879029-7339</ns4:notificationId>
<ns4:sourceTime>2015-08-21T02:27:58.642+02:00</ns4:sourceTime>
<ns5:objectType>SNC</ns5:objectType>
<ns5:objectName>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>SNC</ns6:type>
<ns6:value>lmoro-odu0-sanity</ns6:value>
</ns6:rdn>
</ns5:objectName>
<ns5:osTime>2015-08-21T02:27:58.642+02:00</ns5:osTime>
<ns55:attributeList>
<ns39:snc>
```

```
<ns13:name>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>SNC</ns6:type>
<ns6:value>lmoro-odu0-sanity</ns6:value>
</ns6:rdn>
</ns13:name>
<ns13:vendorExtensions>
<ns38:ciscoSubnetworkConnectionExtension>
<ns38:operState>UP</ns38:operState>
</ns38:ciscoSubnetworkConnectionExtension>
</ns13:vendorExtensions>
</ns39:snc>
</ns55:attributeList>
</ns4:commonEventInformation>
</ns3:message>
</ns3:notify>
</soap:Body>
</soap:Envelope>
```

9.60.5 Service Provisioning – CFS Created

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header>
<header xmlns:ns48="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1"
xmlns:ns47="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns46="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns45="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns44="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns43="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns42="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns40="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns39="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
```

```
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
<msgType>NOTIFICATION</msgType>
</header>
</soap:Header>
<soap:Body>
<ns3:notify xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
```

```
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns39="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns40="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns42="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns43="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns44="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns45="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns46="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns47="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns48="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1">
<ns3:message>
<ns4:commonEventInformation>
<ns4:notificationId>1047</ns4:notificationId>
<ns4:sourceTime>2015-01-14T20:43:23.596-08:00</ns4:sourceTime>
<ns4:vendorExtensions>
<ns46:provisionResponse>
<ns46:cfsCreation>
<ns45:serviceRequestRef>7430</ns45:serviceRequestRef>
<ns45:productName>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>CFS</ns6:type>
<ns6:value>722218</ns6:value>
</ns6:rdn>
</ns45:productName>
</ns46:cfsCreation>
</ns46:provisionResponse>
</ns4:vendorExtensions>
</ns4:commonEventInformation>
</ns3:message>
</ns3:notify>
</soap:Body>
</soap:Envelope>
```

9.60.6 Service Provisioning – CFS Service State Change

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header>
<header xmlns:ns48="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1"
xmlns:ns47="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns46="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns45="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns44="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns43="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns42="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns40="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns39="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
```

```
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
<msgType>NOTIFICATION</msgType>
</header>
</soap:Header>
<soap:Body>
<ns3:notify xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns12="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
```

```
xmlns:ns15="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns39="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns40="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns42="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns43="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns44="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns45="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns46="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns47="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns48="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1">
<ns3:message>
<ns4:commonEventInformation>
<ns4:notificationId>1064</ns4:notificationId>
<ns4:sourceTime>2015-01-14T20:45:05.943-08:00</ns4:sourceTime>
<ns4:vendorExtensions>
<ns46:provisionResponse>
<ns46:cfsStateChange>
<ns45:serviceRequestRef>7449</ns45:serviceRequestRef>
<ns45:productName>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>CFS</ns6:type>
<ns6:value>722219</ns6:value>
</ns6:rdn>
</ns45:productName>
</ns46:cfsStateChange>
</ns46:provisionResponse>
</ns4:vendorExtensions>
</ns4:commonEventInformation>
```

```
</ns3:message>
</ns3:notify>
</soap:Body>
</soap:Envelope>
```

9.60.7 Service Provisioning – CFS Terminate

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header>
<header xmlns:ns48="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1"
xmlns:ns47="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns46="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns45="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns44="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns43="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns42="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns40="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns39="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
```

```
<msgType>NOTIFICATION</msgType>
</header>
</soap:Header>
<soap:Body>
<ns3:notify xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns7="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns8="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns13="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
xmlns:ns14="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns17="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
xmlns:ns19="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
xmlns:ns23="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
xmlns:ns27="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns28="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns30="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
xmlns:ns31="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns32="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
xmlns:ns37="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
xmlns:ns39="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns40="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
xmlns:ns41="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns42="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns43="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
xmlns:ns44="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns45="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
xmlns:ns46="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns47="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
xmlns:ns48="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1">
<ns3:message>
<ns4:commonEventInformation>
<ns4:notificationId>23735</ns4:notificationId>
<ns4:sourceTime>2015-01-16T02:39:38.893+05:30</ns4:sourceTime>
```

```
<ns4:vendorExtensions>
<ns46:terminateResponse>
<ns46:cfsStateChange xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns45:CfsDeletionEventType">
<ns45:serviceRequestRef>1955</ns45:serviceRequestRef>
<ns45:productName>
<ns6:rdn>
<ns6:type>MD</ns6:type>
<ns6:value>CISCO_EPNM</ns6:value>
</ns6:rdn>
<ns6:rdn>
<ns6:type>CFS</ns6:type>
<ns6:value>2214238</ns6:value>
</ns6:rdn>
</ns45:productName>
</ns46:cfsStateChange>
</ns46:terminateResponse>
</ns4:vendorExtensions>
</ns4:commonEventInformation>
</ns3:message>
</ns3:notify>
</soap:Body>
</soap:Envelope>
```

9.60.8 FDN Value Change Notification

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <soap:Header>
        <header
xmlns:ns57="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/fdnvc/v1"
xmlns:ns56="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"
            xmlns:ns55="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns54="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1"
            xmlns:ns53="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns52="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
            xmlns:ns51="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns50="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
            xmlns:ns49="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns48="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"

xmlns:ns47="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns46="http://www.tmforum.org/mtop/msi/xsd/sir/v1"
            xmlns:ns45="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns44="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
            xmlns:ns43="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns42="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"

xmlns:ns41="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns40="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"
            xmlns:ns39="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
            xmlns:ns37="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
            xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
```

```
            xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns32="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
            xmlns:ns31="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
            xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
            xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
            xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
            xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
            xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
            xmlns:ns19="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
            xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
            xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"

xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns12="http://www.tmforum.org/mtop/mri/xsd/conr/v1"
            xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
            xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
            xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
            xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
            xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
            xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1">
            <msgType>NOTIFICATION</msgType>
        </header>
    </soap:Header>
    <soap:Body>
        <ns3:notify xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
            xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/notmsg/v1"
xmlns:ns4="http://www.tmforum.org/mtop/fmw/xsd/cei/v1"
            xmlns:ns5="http://www.tmforum.org/mtop/fmw/xsd/ei/v1"
xmlns:ns6="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
            xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/alm/v1"
xmlns:ns8="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
            xmlns:ns9="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/fmw/xsd/cornot/v1"
            xmlns:ns11="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns12="http://www.tmforum.org/mtop/mri/xsd/conr/v1"

xmlns:ns13="http://www.cisco.com/epnm/mtop/msi/xsd/protectpr/v1"
xmlns:ns14="http://www.tmforum.org/mtop/fmw/xsd/coi/v1"
            xmlns:ns15="http://www.tmforum.org/mtop/nrb/xsd/cri/v1"
xmlns:ns16="http://www.tmforum.org/mtop/nrb/xsd/itu/v1"
```

```
            xmlns:ns17="http://www.tmforum.org/mtop/nrf/xsd/me/v1"
xmlns:ns18="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
            xmlns:ns19="http://www.tmforum.org/mtop/nra/xsd/ituArc/v1"
xmlns:ns20="http://www.tmforum.org/mtop/nrf/xsd/snc/v1"
            xmlns:ns21="http://www.tmforum.org/mtop/nrf/xsd/tpdata/v1"
xmlns:ns22="http://www.tmforum.org/mtop/nrb/xsd/lp/v1"
            xmlns:ns23="http://www.tmforum.org/mtop/nrf/xsd/com/v1"
xmlns:ns24="http://www.cisco.com/epnm/mtop/nrf/xsd/me/ext/v1"
            xmlns:ns25="http://www.cisco.com/epnm/mtop/nrf/xsd/eq/ext/v1"
xmlns:ns26="http://www.cisco.com/epnm/mtop/nrf/xsd/sat/ext/v1"
            xmlns:ns27="http://www.cisco.com/epnm/mtop/nrf/xsd/clu/ext/v1"
xmlns:ns28="http://www.cisco.com/epnm/mtop/nrf/xsd/eh/ext/v1"
            xmlns:ns29="http://www.tmforum.org/mtop/nrf/xsd/eq/v1"
xmlns:ns30="http://www.tmforum.org/mtop/nrf/xsd/eh/v1"
            xmlns:ns31="http://www.tmforum.org/mtop/nrf/xsd/ptp/v1"
xmlns:ns32="http://www.cisco.com/epnm/mtop/nrf/xsd/ptp/ext/v1"
            xmlns:ns33="http://www.cisco.com/epnm/mtop/nrf/xsd/tlr/ext/v1"
xmlns:ns34="http://www.tmforum.org/mtop/nrf/xsd/tl/v1"
            xmlns:ns35="http://www.cisco.com/epnm/mtop/nrf/xsd/cc/ext/v1"
xmlns:ns36="http://www.tmforum.org/mtop/nrf/xsd/cc/v1"
            xmlns:ns37="http://www.cisco.com/epnm/mtop/nrf/xsd/snc/ext/v1"
xmlns:ns38="http://www.tmforum.org/mtop/nrf/xsd/route/v1"
            xmlns:ns39="http://www.tmforum.org/mtop/nrf/xsd/mfdfr/v1"
xmlns:ns40="http://www.tmforum.org/mtop/nrf/xsd/fdfrroute/v1"

xmlns:ns41="http://www.cisco.com/epnm/mtop/nrf/xsd/fdfr/ext/v1"
xmlns:ns42="http://www.cisco.com/epnm/mtop/nrf/xsd/ce/v1"
            xmlns:ns43="http://www.tmforum.org/mtop/nrf/xsd/fdfr/v1"
xmlns:ns44="http://www.tmforum.org/mtop/sb/xsd/csi/v1"
            xmlns:ns45="http://www.tmforum.org/mtop/sb/xsd/svc/v1"
xmlns:ns46="http://www.tmforum.org/mtop/msi/xsd/sir/v1"

xmlns:ns47="http://www.cisco.com/epnm/mtop/nrf/xsd/optical/ext/v1"
xmlns:ns48="http://www.tmforum.org/mtop/sa/xsd/sairsp/v1"
            xmlns:ns49="http://www.tmforum.org/mtop/sa/xsd/sai/v1"
xmlns:ns50="http://www.tmforum.org/mtop/sa/xsd/saiexcpt/v1"
            xmlns:ns51="http://www.tmforum.org/mtop/fmw/xsd/oc/v1"
xmlns:ns52="http://www.tmforum.org/mtop/fmw/xsd/sc/v1"
            xmlns:ns53="http://www.tmforum.org/mtop/fmw/xsd/avc/v1"
xmlns:ns54="http://www.cisco.com/epnm/mtop/sa/xsd/saiexcpt/ext/v1"
            xmlns:ns55="http://www.cisco.com/epnm/mtop/nra/xsd/alm/ext/v1"
xmlns:ns56="http://www.tmforum.org/mtop/nrf/xsd/ftp/v1"

xmlns:ns57="http://www.cisco.com/epnm/mtop/fmw/xsd/ext/fdnvc/v1">
            <ns3:message>
                <ns4:commonEventInformation
xsi:type="ns57:FdnValueChangeType"
                    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                    <ns4:notificationId>1440722107026-
1126</ns4:notificationId>
                    <ns4:sourceTime>2015-08-27T17:35:07.027-
07:00</ns4:sourceTime>
                    <ns5:objectType>CFS</ns5:objectType>
                    <ns5:objectName>
                        <ns6:rdn>
                            <ns6:type>MD</ns6:type>
```

```
                            <ns6:value>CISCO_EPNM</ns6:value>
                        </ns6:rdn>
                        <ns6:rdn>
                            <ns6:type>CFS</ns6:type>
                            <ns6:value>EPL_MyService_modifyT8</ns6:value>
                        </ns6:rdn>
                    </ns5:objectName>
                    <ns5:osTime>2015-08-27T17:35:07.027-07:00</ns5:osTime>
                    <ns57:newObjectName>
                        <ns6:rdn>
                            <ns6:type>MD</ns6:type>
                            <ns6:value>CISCO_EPNM</ns6:value>
                        </ns6:rdn>
                        <ns6:rdn>
                            <ns6:type>CFS</ns6:type>

<ns6:value>EPL_MyService_modifyT8CHANED</ns6:value>
                        </ns6:rdn>
                    </ns57:newObjectName>
                </ns4:commonEventInformation>
            </ns3:message>
        </ns3:notify>
    </soap:Body>
</soap:Envelope>
```

9.61 Alarm Handling

9.61.1 acknowledgeAlarms

9.61.1.1 *SOAP Request*

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:v12="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:v13="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:v14="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:v15="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:v16="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:acknowledgeAlarmsRequest>
         <!--Optional:-->
         <v11:acknowledgeIdList>
            <!--Zero or more repetitions:-->
            <v12:alarmOrTcaId>
               <!--Optional:-->
               <v12:alarmId>
                  <!--Optional:-->
                  <v13:probableCause  qualifier="623656">
                  </v13:probableCause>
                  <!--Optional:-->
```

```
                </v12:alarmId>
             </v12:alarmOrTcaId>
          </v11:acknowledgeIdList>
          <!--Optional:-->
          <v11:username>root</v11:username>
          <!--Optional:-->
       </v11:acknowledgeAlarmsRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

9.61.1.2 *SOAP Response*

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/pm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns8="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns4="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns8:acknowledgeAlarmsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns8="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/pm/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
         <ns8:failedAcknowledgeIdList/>
      </ns8:acknowledgeAlarmsResponse>
   </soap:Body>
</soap:Envelope>
```

9.61.2 unacknowledgeAlarms

9.61.2.1 *SOAP Request*

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:v11="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:v12="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:v13="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:v14="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
```

```
xmlns:v15="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:v16="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1">
   <soapenv:Header>
      <v1:header>
      </v1:header>
   </soapenv:Header>
   <soapenv:Body>
      <v11:unacknowledgeAlarmsRequest>
            <!--Optional:-->
         <v11:unacknowledgeIdList>
            <!--Zero or more repetitions:-->
            <v12:alarmOrTcaId>
               <!--Optional:-->
               <v12:alarmId>
                  <!--Optional:-->
                  <v13:probableCause  qualifier="623656">
                  </v13:probableCause>
                  <!--Optional:-->
                </v12:alarmId>
            </v12:alarmOrTcaId>
         </v11:unacknowledgeIdList>
         <!--Optional:-->
         <v11:username>test</v11:username>
      </v11:unacknowledgeAlarmsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

9.61.2.2 *SOAP Response*

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Header>
      <header xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lay/v1"
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/pm/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns8="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns4="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"/>
   </soap:Header>
   <soap:Body>
      <ns8:unacknowledgeAlarmsResponse
xmlns="http://www.tmforum.org/mtop/fmw/xsd/hdr/v1"
xmlns:ns2="http://www.tmforum.org/mtop/fmw/xsd/gen/v1"
xmlns:ns3="http://www.tmforum.org/mtop/fmw/xsd/nam/v1"
xmlns:ns4="http://www.tmforum.org/mtop/nra/xsd/alarmid/v1"
xmlns:ns5="http://www.tmforum.org/mtop/nra/xsd/prc/v1"
xmlns:ns6="http://www.tmforum.org/mtop/nra/xsd/atcaid/v1"
xmlns:ns7="http://www.tmforum.org/mtop/nra/xsd/tcaid/v1"
xmlns:ns8="http://www.tmforum.org/mtop/rtm/xsd/ah/v1"
xmlns:ns9="http://www.tmforum.org/mtop/fmw/xsd/msg/v1"
xmlns:ns10="http://www.tmforum.org/mtop/nra/xsd/pm/v1"
```

```
xmlns:ns11="http://www.tmforum.org/mtop/nra/xsd/com/v1"
xmlns:ns12="http://www.tmforum.org/mtop/nrb/xsd/lay/v1">
         <ns8:failedUnacknowledgeIdList/>
      </ns8:unacknowledgeAlarmsResponse>
   </soap:Body>
</soap:Envelope>
```

10 References

For more information on MTOSI and to access other relevant documents, see TMForum MTOSI Documents Home.