Programmer's Guide for Cisco Hosted Collaboration Mediation Interface

Release 1.1

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CONTENTS

Preface

This section explains the objectives and intended audience of this publication and describes the conventions that convey instructions and other information.

Objectives

This guide describes the Cisco Hosted Collaboration Mediation Interface and provides instructions for using and administering it.

Conventions

This document uses the following conventions:

Item	Convention
Commands and keywords	**boldface** font
Displayed session and system information	`screen` font
Information that the user must enter	**`boldface screen`** font
Variables that the user must supply	*`italic screen`* font
Menu items and button names	**boldface** font
Selecting a menu item	**Option > Network Preferences**

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

Timesaver Means *the described action saves time*. You can save time by performing the action described in the paragraph.

Tip Means *the following information will help you solve a problem.*

Product Documentation

Table 1 lists the HCM documentation set.

We sometimes update the documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates. You must access the links in Table 1 for the most current HCM 1.1 documentation.

Table 1 Product Documentation

Document Title	Available Formats
User Guide for Cisco Hosted Collaboration Mediation 1.1	On Cisco.com: http://www.cisco.com/en/US/products/ps11243/products_user_guide_list.html
Installation Guide for Cisco Hosted Collaboration Mediation 1.1	On Cisco.com: http://www.cisco.com/en/US/products/ps11243/prod_installation_guides_list.html
Release Notes for Cisco Hosted Collaboration Mediation 1.1	On Cisco.com: http://www.cisco.com/en/US/products/ps11243/prod_release_notes_list.html
Programmer's Guide for Cisco Hosted Collaboration Mediation Interface 1.1 (this document)	• In PDF on the product DVD. • On Cisco.com: http://www.cisco.com/en/US/products/ps11243/prod_technical_reference_list.html
Open Source Used In Cisco Hosted Collaboration Mediation 1.1	On Cisco.com: http://www.cisco.com/en/US/products/ps11243/products_licensing_information_listing.html

Obtaining Documentation and Submitting a Service Request

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 an RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service. Cisco currently supports RSS Version 2.0.

CHAPTER 1

Getting Started

This chapter describes how to start using the Mediation Interface of Cisco Hosted Collaboration Mediation (HCM). You can manage services through a variety of associated requests or operations.

The various requests and operations are explained in Chapter 2, "Understanding Provision Web Service Interface".

This guide also includes feature descriptions, sample Extensible Markup Language (XML) code, typical workflow steps, and other relevant information.

This chapter contains the following sections:

Audience

This guide is intended to be a technical resource for application developers who want to use the Mediation Interface to retrieve the data from Cisco Hosted Collaboration Solution (HCS) deployments and implementations.

To use this guide, you need to have an advanced level of understanding of Internet network design, operation, and terminology. You also need to understand the basic concepts of HCM.

You should also understand high-level programming languages such as Java, or an equivalent language. and know the following:

- XML and XML Schema
- Web Service Definition Language (WSDL)
- Web Services
- Socket programming
- Web Services standards:
  - WS-Notification

  - WS-Enumeration
  - WS-Resources

In most cases, the Mediation Interface operations, correlate to HCM operations.

You should have a basic understanding of Cisco HCS.

Feature Summary

The Mediation Interface provides the following:

- Single entry point for client systems to issue commands to HCM.
- Ability to:
  - Query inventory.
  - Retrieve list data using WS-Notification and WS-Enumeration specification recommendations.

Functional Architecture

The Mediation Interface functional architecture consists of:

- WSDL/XSD files with Simple Object Access Protocol (SOAP) HTTP bindings that expose the NBI requests and XML-based data models for all northbound services.
- The Mediation Interface that receives, tracks, and manages the results of all NBI requests.

Client Requirements

The Mediation Interface uses Web Services standards. The client must satisfy the following requirements:

- Must be able to connect to HCM using HTTP or HTTPS.
- To make a request, the client does not have to be Web Services-based; it can be a plain Java client.

Mediation Interface Web Services Resources

All services exposed by the Mediation Interface are defined, using WSDL/XSD with SOAP HTTP bindings and exposed as Web Services.

Requested bulk data is retrieved by WS-Enumeration standard requests and responses.

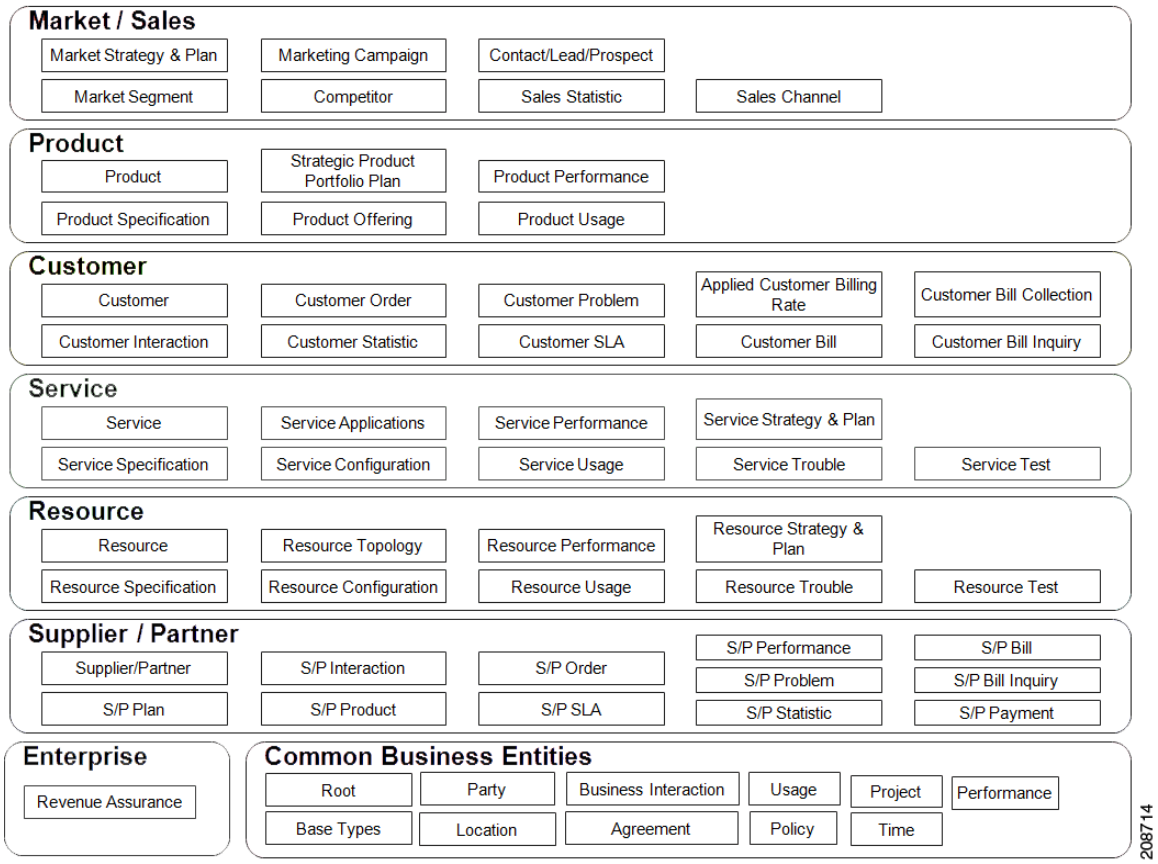
TM Forum Shared Information/Data Model Overview

The TM Forum Shared Information/Data Model (SID) is used as the foundation data model and the version used is Information Framework Phase VIII.

HCM will implement the SID as its common model to create and maintain the data interoperability layer in HCS. HCM reconciles semantic differences among applications through real-time mediation. This enables you to modify or replace components without making major changes to other components in the architecture.

See Figure 1-1 for the TM Forum SID Domains.

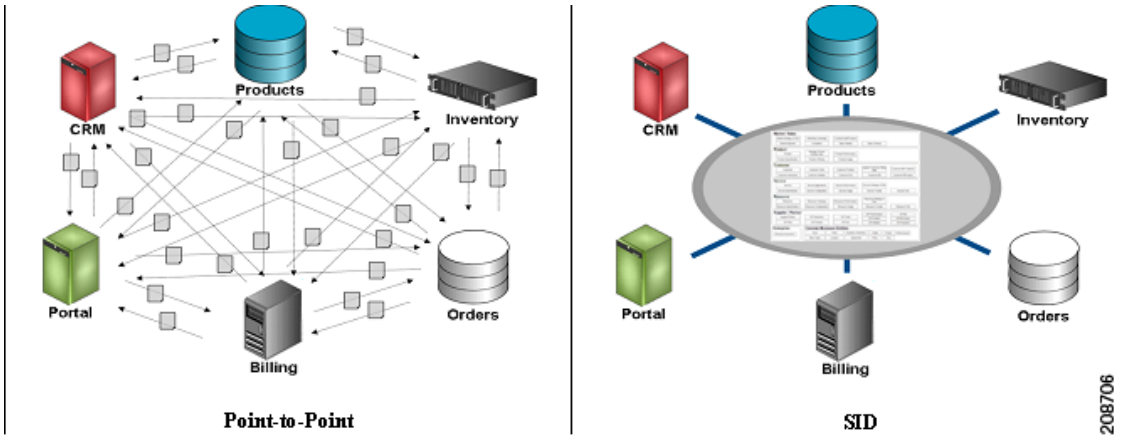
Figure 1-1 TM Forum SID Domains



Mapping each application and service interface point-to-point, adds complexity. Mapping to the SID, significantly reduces complexity and provides an inherent layer of abstraction. This ensures consistent interpretation of data across diverse services and data sources, within the HCM architecture.

See Figure 1-2 for an example of the point-to-point integration and SID integration.

Figure 1-2 Integration Scenarios



Message Patterns

The domain manager employs Simple Object Access Protocol (SOAP) message patterns to facilitate requests and responses (synchronous). For more information, refer Synchronous Message Pattern, page 1-4.

Synchronous Message Pattern

All domain managers implement the basic request and response SOAP message pattern. A SOAP request can be a list operation. When a SOAP request is submitted for processing, an immediate response is returned.

The response will yield the expected result for the corresponding SOAP request. See Appendix B, "Sample XML API Requests and Responses" for sample expected results.

In all cases, responses are transformed into a standard SID-based structure and returned to the service consumer for processing.

CHAPTER 2

Understanding Provision Web Service Interface

This chapter describes the Mediation provision web service interfaces for HCM. You can provision and manage:

- Customer Data Services
- Site Data Services
- Subscriber Data Services

This chapter contains the following sections:

Provision Data Services

The Mediation layer exposes SID-based northbound data service interfaces to provision and monitor Unified Communications (UC) services.

Table 2-1 lists the data services that you can provision and the description.

Table 2-1 Provision Data Services

Data Service	Description
Provision Customer	Allows you to retrieve customer objects and application instances.
Provision Site	Allows you to retrieve customer site resources.
Provision Subscriber	Allows you to retrieve services for customer subscribers.

Provision Customer Data Services

The ProvisionCustomer data service exposes the HCM northbound interface and operations, enabling provision management of the customer infrastructure objects. The section describes the HCM XML API for the ProvisionCustomer data service, which contains the following operations:

listCustomer

- ListCustomerRequest—Appendix B, “Sample listCustomer XML Request”
- ListCustomerResponse—Appendix B, “Sample listCustomer XML Response”

This section includes:

See Appendix A, “HCSProvisionCustomer.wsdl File” for the ProvisionCustomer WSDL file.

ListCustomerRequest

Table 2-2 lists the Entity, Path/Attribute, and Data Types for the ListCustomerRequest operation.

Table 2-2 ListCustomerRequest

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListCustomerRequest (VOSS sync)			
Customer	ListCustomerRequest/Customer	Customer	—
	partyRoleId	String	Mandatory. This ID is used for dynamic routing only. You cannot use this ID for selection criteria. To select a particular customer, specify the corresponding criteria in the CharacteristicValue collection. For example, partyRoleId for VOSS.
Customer CharacteristicValues [*]	…/RootEntityDescribedBy	List *CharacteristicValue*	—
	CharacteristicSpecification/Name	String	The following are the VOSS filter attributes: • partyRoleId • locality
	Value	String	—

ListCustomerResponse

Table 2-3 lists the Entity, Path/Attribute, and Data Types for the ListCustomerResponse operation.

Table 2-3 ListCustomerResponse

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListCustomerResponse (VOSS)			
Customer [*]	…/ Customer	List *Customer*	VOSS. Customer corresponds to an Enterprise.
	partyRoleId	String	An identifier for the customer
Customer CharacteristicValues [*]	…/RootEntityDescribedBy	List CharacteristicValue	—
	Action	ActionType (Create/Update/Delete)	The operation that need to be performed.
	CharacteristicSpecification/Name	String	Example: CallProcessor, UnifiedMessageProcessor
	Value	String	—
MainContact	…/PartyRoleAssoc[associationType="MainContact"] /partyRole(xsi:type="Contact")	Contact	VOSS—Mandatory.
Individual	…/Party(xsi:type=Individual)	Individual	—
Individual Name	…/IndividualNamedUsing	Individual Name	—
	givenNames	String	First name(s)
	familyNames	String	Last name(s)
PostalAddress	…/PartyRoleContactableVia(xsi:type="PostalContact") /AbstractGeographicAddress (xsi:type="UrbanPropertyAddress")	UrbanPropertyAddress	VOSS
	streetAddress	Array *String*	VOSS. You can enter up to three lines.
	locality	String	City, town, village.
	stateOrProvince	String	—
	postcode	String	—
	country	String	Three character country code. For example, USA.

Provision Site Data Services

The ProvisionSite data service exposes the HCM northbound interface and operations, enabling provision management of the Site service.

This section describes the HCM XML API for the ProvisionSite data service that contains the following operations:

- listSite
  - ListSiteRequest—Appendix B, “Sample listSite XML Request”
  - ListSiteResponse—Appendix B, “Sample listSite XML Response”

This section includes:

- ListSiteRequest, page 2-6
- ListSiteResponse, page 2-7

See Appendix A, “HCSProvisionSite.wsdl File” for the ProvisionSite WSDL file.

See Appendix B, “Sample ProvisionSite Data Service XML API Requests and Responses” for samples of the outbound request message and inbound server response message.

ListSiteRequest

Table 2-4 lists the Entity, Path/Attribute, and Data Types for the ListSiteRequest operation.

Table 2-4 ListSiteRequest

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListSiteRequest (VOSS sync)			
GeographicSite	List GeographicSite Request/ GeographicSite	GeographicSite	—
Customer	…/PlacePartyRoleAssoc [placeRole = "Customer"]/PartyRole(xsi:type =Customer)	Customer	Mandatory. This is used as the selection criteria for sites in VOSS.
	partyRoleId	String	—
GeographicSite CharacteristicValues [*]	…/RootEntityDescribedBy	List *CharacteristicValue*	—
	CharacteristicSpecification/ Name	String	The following are the VOSS filter attributes: • siteID • locality • dialPlanSiteCode
	Value	String	—

ListSiteResponse

Table 2-5 lists the Entity, Path/Attribute, and Data Types for the ListSiteResponse operation.

Table 2-5 ListSiteResponse

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListSiteResponse (VOSS)			
Geographic Site [*]	…/GeographicSite	List *GeographicSite*	VOSS
	Sub-structure of GeographicSite matches the structure of GeographicSite defined in ListSiteRequest.	—	—

Provision Subscriber Data Services

The ProvisionSubscriber data service exposes the HCM northbound interface and operations, enabling provision management of the Subscriber service.

This section describes the HCM XML API for the ProvisionSubscriber data service that contains the following operations:

- listSubscriber
  - listSubscriberRequest—Appendix B, "Sample listSubscriber XML Request"
  - listSubscriberResponse—Appendix B, "Sample listSubscriber XML Response"
- listSubscriberProduct
  - listSubscriberProductRequest—Appendix B, "Sample listSubscriberProduct XML Request"
  - listSubscriberProductResponse—Appendix B, "Sample listSubscriberProduct XML Response"

This section includes:

See Appendix A, "HCSProvisionSubscriber.wsdl File" for the ProvisionSubscriber WSDL file.

See Appendix B, "Sample ProvisionSubscriber Data Service XML API Requests and Responses" for samples of outbound request message and inbound server response message.

ListSubscriberRequest

Table 2-6 lists the Entity, Path/Attribute, and Data Types of the ListSubscriberRequest operation.

Table 2-6 ListSubscriberRequest

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListSubscriberRequest (VOSS sync)			
Subscriber	List Subscriber Request/Subscriber	Subscriber	—
Customer	…/PartyRoleAssoc[associationType = "Customer"]/PartyRole(xsi:type= Customer)	Customer	Mandatory. This is used as the selection criteria for subscribers in VOSS.
	partyRoleId	String	—
Subscriber CharacteristicValues [*]	…/RootEntityDescribedBy	List *CharacteristicValue*	—
	CharacteristicSpecification/Name	String	The following are the VOSS filter attributes: • partyRoleId • siteId And one of the following: – givenNames – familyNames – Department
	Value	String	—

ListSubscriberResponse

Table 2-7 lists the Entity, Path/Attribute, and Data Types of the ListSubscriberResponse operation.

Table 2-7 ListSubscriberResponse

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListSubscriberResponse (VOSS)			
Subscriber [*]	…/Subscriber	List *Subscriber*	VOSS
Subscriber	CreateSubscriberRequest/Subscriber	Subscriber	The end user within the enterprise.
	partyRoleId	String	Mandatory. An identifier for the subscriber.
Individual	…/Party(xsi:type=Individual)	Customer	—
IndividualName	…/IndividualNamedUsing	Individual Name	Name of the subscriber.
	givenNames	String	VOSS—Madatory for the create operation. First names(s).
	familyNames	String	VOSS—Madatory for the create operation. Last names(s).
Contact Medium [*]	.../PartyRoleContactableVia	Contact Medium [*]	—
Email	...(xsi:type=EmailContact)/ eMailAddress	String	—
Phone	...(xsi:type=TelephoneNumber)/number	List *Telephone Number*	—
	type	String	VOSS—Primary
	number	String	—
Postal Address	locality	String	—
	stateOrProvince	String	—
	postcode	String	—
	country	String	VOSS—Mandatory for the create option.
	timeZone/name	timeZone Enum	For example, GMT-05:00, Eastern (New York)

ListSubscriberProductRequest

Table 2-8 lists the Entity, Path/Attribute, and Data Types of the ListSubscriberProductRequest operation.

Table 2-8 ListSubscriberProductRequest

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListSubscriberProductRequest (VOSS sync)			
Product	List Subscriber ProductRequest/Product	Product	—
Customer	…/ProductOfInterestTo(xsi:type = "PartyRoleProductInvolvement") [productInvolvementRole="Customer "]/PartyRole(xsi:type=Customer)	Customer	Mandatory
	partyRoleId	String	—
Selection CharacteristicValues [*]	…/RootEntityDescribedBy	List *CharacteristicValue*	The VOSS filter attribute is partyRoleId (Mandatory).
	CharacteristicSpecification/Name	String	—
	Value	String	—

ListSubscriberProductResponse

Table 2-9 lists the Entity, Path/Attribute, and Data Types of the ListSubscriberProductResponse operation.

Table 2-9 ListSubscriberProductResponse

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListSubscriberProductResponse (VOSS)			
Product [*]	…/ Product	List *Product*	VOSS
Result[*]	Result	Entity	Contains the subclass of Entity corresponding to the data returned for the requested CorrelationId.
Product [*]	… (xsi:type="Product")	Product	Response for CorrleationId corresponding to a List Infrastructure Product Request and List Subscriber Product Request.
Geographic Site	…/ProductLocatedVia (xsi:type="Geographic Site")	Geographic Site	—
	ID	String	—

Table 2-9 ListSubscriberProductResponse (continued)

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
Customer	…/ProductOfInterest [productInvolvementRole="Customer"] (xsi:type="PartyRoleProductInvolvement")/PartyRole (xsi:type="Customer)	Customer	—
	partyRoleId	—	—
Subscriber	…/ProductOfInterest [productInvolvementRole="Subscriber"] (xsi:type="PartyRoleProductInvolvement")/PartyRole (xsi:type="Subscriber)	Subscriber	—
	partyRoleId	—	—
Product Specification	…/ProductSpecification	ProductSpecification	—
	productId	String	—
ProductCharacteristicValue [*]	…/ProductCharacteristicValue	List *ProductCharacteristicValue*	Product characteristics for the product as specified in the order.
	Value	String	—
Product Characteristic Type	…/ProdCharSpecDescribesProductCharacteristicValue	ProdCharSpecDescribersProductCharacteristicValue	—
	ID	String	—
Sub-Product CharacteristicValue [*]	.../ ProductCharacteristicValueRelationship/ ProductCharacteristicValue	List *ProductCharacteristicValue*	—
	ProdSpecCharDescribesProdCharacteristicValue /ID	String	—
	value	String	—
Physical Device	…/BusinessInteractionInvolvesResource (xsi:type= Physical Device)	PhysicalDevice	—
	commonName	String	—
Capability	…/LogicalPhysicalResource [typeofLPDependency = "Capability"]/LogicalResource	LogicalResource	—
	commonName	String	—

APPENDIX A

WSDL and XSD Files

This appendix contains sample WSDL and XSD files. It includes the following sections:

HCSProvision.xsd File

URL—http://*HCM_IP_address*:*HCM_Port_Number*/services/Provision?xsd

The following is a sample XML code from the HCSProvision.xsd file.

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
 targetNamespace="http://www.cisco.hcs.com/HCSProvision.xsd"
 xmlns:prov="http://www.cisco.hcs.com/HCSProvision.xsd">


   <!-- The type: com.cisco.nm.ms2.hcs.provision.AbstractGeographicAddress -->
   <xs:element name="AbstractGeographicAddress" type="prov:AbstractGeographicAddress"
abstract="true"/>
   <xs:complexType name="AbstractGeographicAddress" abstract="true">
      <xs:complexContent>
         <xs:extension base="prov:GeographicPlace">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ActionEnum -->
   <xs:simpleType name="ActionEnum">
      <xs:restriction base="xs:string">
```

```
            <xs:enumeration value="Add"/>
            <xs:enumeration value="Cancel"/>
            <xs:enumeration value="Change"/>
         </xs:restriction>
      </xs:simpleType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.BusinessInteraction -->
      <xs:element name="BusinessInteraction" type="prov:BusinessInteraction"
abstract="true"/>
      <xs:complexType name="BusinessInteraction" abstract="true">
         <xs:annotation>
            <xs:documentation>
A BusinessInteraction is an arrangement, contract, communication or joint activity
between one or more PartyRoles, ResourceRoles, or CustomerAccounts.  A
BusinessInteraction may consist of one or more BusinessInteractionItems.  A
BusinessInteractionItem may refer to a Product, Service, Resource, or one of their
specifications.  A BusinessInteraction is further defined by one or more Places.  One
BusinessInteraction may reference another BusinessInteraction and one
BusinessInteractionItem may reference another BusinessInteractionItem on the same or
different BusinessInteraction.  There are five types of BusinessInteractions:  Requests,
Responses, Notifications, Agreements, and Instructions.
            </xs:documentation>
         </xs:annotation>
         <xs:complexContent>
            <xs:extension base="prov:Entity">
               <xs:sequence>
                  <xs:element name="BusinessInteractionInvolves"
type="prov:BusinessInteractionRole" minOccurs="0" maxOccurs="unbounded"/>
                  <xs:element name="BusinessInteractionType"
type="prov:BusinessInteractionType" minOccurs="0"/>
                  <xs:element name="interactionDate" type="xs:dateTime" minOccurs="0">
                     <xs:annotation>
                        <xs:documentation>
Date interaction initiated.
                        </xs:documentation>
                     </xs:annotation>
                  </xs:element>
                  <xs:element name="interactionDateComplete" type="xs:dateTime" minOccurs="0">
                     <xs:annotation>
                        <xs:documentation>
The date on which an interaction is closed or completed.
                        </xs:documentation>
```

```
                    </xs:annotation>
                 </xs:element>
                 <xs:element name="interactionStatus" type="xs:string" minOccurs="0">
                    <xs:annotation>
                       <xs:documentation>
The current condition of an interaction, such as open, in research, closed, and so forth.
                       </xs:documentation>
                    </xs:annotation>
                 </xs:element>
              </xs:sequence>
           </xs:extension>
        </xs:complexContent>
     </xs:complexType>
     <!-- The type: com.cisco.nm.ms2.hcs.provision.BusinessInteractionItem -->
     <xs:element name="BusinessInteractionItem" type="prov:BusinessInteractionItem"
abstract="true"/>
     <xs:complexType name="BusinessInteractionItem" abstract="true">
        <xs:annotation>
           <xs:documentation>
The purpose for the BusinessInteraction expressed in terms of a ProductSpecification,
ProductOffering, ServiceSpecification or ResourceSpecification or may refer to a Product,
Service, or Resource.
           </xs:documentation>
        </xs:annotation>
        <xs:sequence>
          <xs:element name="BusinessInteractionItemInvolvesResource" type="prov:Resource"
minOccurs="0"/>
           <xs:element name="BusinessInteractionItemInvolvesProduct" type="prov:Product"
minOccurs="0"/>
           <xs:element name="BusinessInteractionItemReferences"
type="prov:BusinessInteractionItem" minOccurs="0" maxOccurs="unbounded"/>
           <xs:element name="BusinessInteractionItemInvolves"
type="prov:BusinessInteractionRole" minOccurs="0" maxOccurs="unbounded"/>
           <xs:element name="interactionItemStatus" type="xs:string" minOccurs="0"/>
        </xs:sequence>
     </xs:complexType>
     <!-- The type: com.cisco.nm.ms2.hcs.provision.BusinessInteractionRole -->
     <xs:element name="BusinessInteractionRole" type="prov:BusinessInteractionRole"/>
     <xs:complexType name="BusinessInteractionRole">
        <xs:annotation>
```

```
         <xs:documentation>
A Party or Resource playing a role in a BusinessInteraction.
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="interactionRole" type="xs:string" minOccurs="0">
            <xs:annotation>
               <xs:documentation>
The part a BusinessActor plays in an interaction, such as requester,  responder,
recipient, and so forth.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.BusinessInteractionType -->
   <xs:element name="BusinessInteractionType" type="prov:BusinessInteractionType"/>
   <xs:complexType name="BusinessInteractionType">
      <xs:annotation>
         <xs:documentation>
The possible types of BusinessInteractions that can occur.  BusinessInteractionTypes can
be with the associated BusinessParticipantTypes that can participate in a
BusinessInteraction.
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="name" type="xs:string" minOccurs="0">
            <xs:annotation>
               <xs:documentation>
The name of an Interaction Type, such as Customer Inquiry, Customer Quote/Offer, Trouble
Report.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CharacteristicActionEnum -->
   <xs:simpleType name="CharacteristicActionEnum">
      <xs:restriction base="xs:string">
```

```
            <xs:enumeration value="Create"/>
            <xs:enumeration value="Delete"/>
            <xs:enumeration value="Update"/>
         </xs:restriction>
      </xs:simpleType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.CharacteristicSpecValue -->
      <xs:element name="CharacteristicSpecValue" type="prov:CharacteristicSpecValue"/>
      <xs:complexType name="CharacteristicSpecValue">
         <xs:annotation>
            <xs:documentation>
A number or text that can be assigned to a CharacteristicSpecification.
            </xs:documentation>
         </xs:annotation>
         <xs:sequence>
            <xs:element name="value" type="xs:string" minOccurs="0">
               <xs:annotation>
                  <xs:documentation>
A discrete value that the characteristic can take on.
                  </xs:documentation>
               </xs:annotation>
            </xs:element>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.CharacteristicSpecification -->
      <xs:element name="CharacteristicSpecification"
type="prov:CharacteristicSpecification"/>
      <xs:complexType name="CharacteristicSpecification">
         <xs:annotation>
            <xs:documentation>
A quality or distinctive feature that defines an entity.  The characteristic can be take
on a discrete value, such as color, can take on a range of values, (for example,
sensitivity of 100-240 mV), or can be derived from a formula (for example, usage time
(hrs) = 30 - talk time *3).
            </xs:documentation>
         </xs:annotation>
         <xs:sequence>
            <xs:element name="name" type="xs:string" minOccurs="0">
               <xs:annotation>
                  <xs:documentation>
```

```
A word, term, or phrase by which the CharacteristicSpecification is known and
distinguished from other CharacteristicSpecifications.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
         <xs:element name="valueType" type="xs:string" minOccurs="0">
            <xs:annotation>
               <xs:documentation>
A kind of value that the characteristic can take on, such as numeric, text, and so forth.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
         <xs:element name="CharacteristicSpecificationEnumeratedBy"
type="prov:CharacteristicSpecValue" minOccurs="0" maxOccurs="unbounded"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CharacteristicValue -->
   <xs:element name="CharacteristicValue" type="prov:CharacteristicValue"/>
   <xs:complexType name="CharacteristicValue">
      <xs:annotation>
         <xs:documentation>
A value of a CharacteristicSpecifcation chosen or entered (if no values are specified)
for a Entity that further defines what the Entity is.
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="value" type="xs:string" minOccurs="0">
            <xs:annotation>
               <xs:documentation>
A fact that describes a Entity.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
         <xs:element name="action" type="prov:CharacteristicActionEnum" minOccurs="0"/>
         <xs:element name="CharacteristicSpecification"
type="prov:CharacteristicSpecification" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Contact -->
```

```
   <xs:element name="Contact" type="prov:Contact"/>
   <xs:complexType name="Contact">
      <xs:complexContent>
         <xs:extension base="prov:PartyRole">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ContactMedium -->
   <xs:element name="ContactMedium" type="prov:ContactMedium" abstract="true"/>
   <xs:complexType name="ContactMedium" abstract="true">
      <xs:annotation>
         <xs:documentation>
A means by which communication may be established with a party (individual or
organization).Contact Medium is an abstract concept that should be subclassed as
required.
         </xs:documentation>
      </xs:annotation>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Context -->
   <xs:element name="Context" type="prov:Context" abstract="true"/>
   <xs:complexType name="Context" abstract="true">
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateCustomerContext -->
   <xs:element name="CreateCustomerContext" type="prov:CreateCustomerContext"/>
   <xs:complexType name="CreateCustomerContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
           <xs:element name="CreateCustomerResponse" type="prov:CreateCustomerResponse"
minOccurs="0"/>
             <xs:element name="CreateCustomerRequest" type="prov:CreateCustomerRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateCustomerRequest -->
   <xs:element name="CreateCustomerRequest" type="prov:CreateCustomerRequest"/>
```

```
   <xs:complexType name="CreateCustomerRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="Customer" type="prov:Customer" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateCustomerResponse -->
   <xs:element name="CreateCustomerResponse" type="prov:CreateCustomerResponse"/>
   <xs:complexType name="CreateCustomerResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateDeviceContext -->
   <xs:element name="CreateDeviceContext" type="prov:CreateDeviceContext"/>
   <xs:complexType name="CreateDeviceContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="CreateDeviceResponse" type="prov:CreateDeviceResponse"
minOccurs="0"/>
               <xs:element name="CreateDeviceRequest" type="prov:CreateDeviceRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateDeviceRequest -->
   <xs:element name="CreateDeviceRequest" type="prov:CreateDeviceRequest"/>
   <xs:complexType name="CreateDeviceRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
```

```
            <xs:element name="PhysicalDevice" type="prov:PhysicalDevice" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateDeviceResponse -->
   <xs:element name="CreateDeviceResponse" type="prov:CreateDeviceResponse"/>
   <xs:complexType name="CreateDeviceResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateSiteContext -->
   <xs:element name="CreateSiteContext" type="prov:CreateSiteContext"/>
   <xs:complexType name="CreateSiteContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="CreateSiteResponse" type="prov:CreateSiteResponse"
minOccurs="0"/>
               <xs:element name="CreateSiteRequest" type="prov:CreateSiteRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateSiteRequest -->
   <xs:element name="CreateSiteRequest" type="prov:CreateSiteRequest"/>
   <xs:complexType name="CreateSiteRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
            <xs:element name="GeographicSite" type="prov:GeographicSite" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
```

```
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateSiteResponse -->
   <xs:element name="CreateSiteResponse" type="prov:CreateSiteResponse"/>
   <xs:complexType name="CreateSiteResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateSubscriberContext -->
   <xs:element name="CreateSubscriberContext" type="prov:CreateSubscriberContext"/>
   <xs:complexType name="CreateSubscriberContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="CreateSubscriberResponse"
type="prov:CreateSubscriberResponse" minOccurs="0"/>
               <xs:element name="CreateSubsubscriberRequest"
type="prov:CreateSubscriberRequest" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateSubscriberRequest -->
   <xs:element name="CreateSubscriberRequest" type="prov:CreateSubscriberRequest"/>
   <xs:complexType name="CreateSubscriberRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="Subscriber" type="prov:Subscriber" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CreateSubscriberResponse -->
   <xs:element name="CreateSubscriberResponse" type="prov:CreateSubscriberResponse"/>
   <xs:complexType name="CreateSubscriberResponse">
```

```
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Customer -->
   <xs:element name="Customer" type="prov:Customer"/>
   <xs:complexType name="Customer">
      <xs:annotation>
         <xs:documentation>
A person or organization that buys products and services from the enterprise or receives
free offers or services.  This is modeled as a Party playing the role of Customer. A
Customer is a type of PartyRole.  Customers can also be other service providers who resell
the enterprises products, other service providers that lease the enterprise&amp;apos;s
resources for utilization by the other service provider&amp;apos;s products and services, and
so forth.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:PartyRole">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CustomerOrder -->
   <xs:element name="CustomerOrder" type="prov:CustomerOrder" abstract="true"/>
   <xs:complexType name="CustomerOrder" abstract="true">
      <xs:annotation>
         <xs:documentation>
A CustomerOrder is a communication used to procure a Product.  There are different types
of requests, such as AccessServiceRequests (ASRs), LocalServiceRequests (LSRs),
DirectoryServiceRequests (DSRs), ProductOrders (PSRs).The abstract Order object provides
a generalization of relationships.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Request">
            <xs:sequence>
```

```
            <xs:element name="CustomerOrderComprisedOf" type="prov:CustomerOrderItem"
minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.CustomerOrderItem -->
   <xs:element name="CustomerOrderItem" type="prov:CustomerOrderItem"/>
   <xs:complexType name="CustomerOrderItem">
      <xs:annotation>
         <xs:documentation>
The purpose for the Customer Order expressed in terms of a Product Offering or a Product
(for a change order) inherited from BusinessInteractionItem.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:BusinessInteractionItem">
            <xs:sequence>
               <xs:element name="orderItemNumber" type="xs:int" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteCustomerContext -->
   <xs:element name="DeleteCustomerContext" type="prov:DeleteCustomerContext"/>
   <xs:complexType name="DeleteCustomerContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
           <xs:element name="DeleteCustomerResponse" type="prov:DeleteCustomerResponse"
minOccurs="0"/>
             <xs:element name="DeleteCustomerRequest" type="prov:DeleteCustomerRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteCustomerRequest -->
   <xs:element name="DeleteCustomerRequest" type="prov:DeleteCustomerRequest"/>
```

```
   <xs:complexType name="DeleteCustomerRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="Customer" type="prov:Customer" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteCustomerResponse -->
   <xs:element name="DeleteCustomerResponse" type="prov:DeleteCustomerResponse"/>
   <xs:complexType name="DeleteCustomerResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteDeviceContext -->
   <xs:element name="DeleteDeviceContext" type="prov:DeleteDeviceContext"/>
   <xs:complexType name="DeleteDeviceContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
              <xs:element name="DeleteDeviceResponse" type="prov:DeleteDeviceResponse"
minOccurs="0"/>
               <xs:element name="DeleteDeviceRequest" type="prov:DeleteDeviceRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteDeviceRequest -->
   <xs:element name="DeleteDeviceRequest" type="prov:DeleteDeviceRequest"/>
   <xs:complexType name="DeleteDeviceRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
```

```
                <xs:element name="PhysicalDevice" type="prov:PhysicalDevice" minOccurs="0"/>
                </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteDeviceResponse -->
      <xs:element name="DeleteDeviceResponse" type="prov:DeleteDeviceResponse"/>
      <xs:complexType name="DeleteDeviceResponse">
         <xs:complexContent>
            <xs:extension base="prov:OperationResponse">
               <xs:sequence/>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteSiteContext -->
      <xs:element name="DeleteSiteContext" type="prov:DeleteSiteContext"/>
      <xs:complexType name="DeleteSiteContext">
         <xs:complexContent>
            <xs:extension base="prov:Context">
               <xs:sequence>
                  <xs:element name="DeleteSiteResponse" type="prov:DeleteSiteResponse"
minOccurs="0"/>
                  <xs:element name="DeleteSiteRequest" type="prov:DeleteSiteRequest"
minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteSiteRequest -->
      <xs:element name="DeleteSiteRequest" type="prov:DeleteSiteRequest"/>
      <xs:complexType name="DeleteSiteRequest">
         <xs:complexContent>
            <xs:extension base="prov:OperationRequest">
               <xs:sequence>
               <xs:element name="GeographicSite" type="prov:GeographicSite" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
```

```
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteSiteResponse -->
   <xs:element name="DeleteSiteResponse" type="prov:DeleteSiteResponse"/>
   <xs:complexType name="DeleteSiteResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteSubscriberContext -->
   <xs:element name="DeleteSubscriberContext" type="prov:DeleteSubscriberContext"/>
   <xs:complexType name="DeleteSubscriberContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="DeleteSubscriberResponse"
type="prov:DeleteSubscriberResponse" minOccurs="0"/>
               <xs:element name="DeleteSubscriberRequest"
type="prov:DeleteSubscriberRequest" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteSubscriberRequest -->
   <xs:element name="DeleteSubscriberRequest" type="prov:DeleteSubscriberRequest"/>
   <xs:complexType name="DeleteSubscriberRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="Subscriber" type="prov:Subscriber" minOccurs="0"/>
               <xs:element name="deleteEvenIfServicesExist" type="xs:boolean"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DeleteSubscriberResponse -->
```

```
   <xs:element name="DeleteSubscriberResponse" type="prov:DeleteSubscriberResponse"/>
   <xs:complexType name="DeleteSubscriberResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.DomainManagerEnum -->
   <xs:simpleType name="DomainManagerEnum">
      <xs:restriction base="xs:string">
         <xs:enumeration value="CUPMDomainManager"/>
         <xs:enumeration value="VOSSDomainManager"/>
         <xs:enumeration value="WebExDomainManager"/>
      </xs:restriction>
   </xs:simpleType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.EmailContact -->
   <xs:element name="EmailContact" type="prov:EmailContact"/>
   <xs:complexType name="EmailContact">
      <xs:annotation>
         <xs:documentation>
The eMail address to use when contacting a given PartyRole. An eMailContact is a type of
ContactMedium.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:ContactMedium">
            <xs:sequence>
               <xs:element name="eMailAddress" type="xs:string" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
full e-mail address in standard format
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
```

```
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Entity -->
   <xs:element name="Entity" type="prov:Entity" abstract="true"/>
   <xs:complexType name="Entity" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class that is used to represent entities that cannot be directly
managed (e.g., a hub).
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:RootEntity">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.EntitySpecification -->
   <xs:element name="EntitySpecification" type="prov:EntitySpecification"
abstract="true"/>
   <xs:complexType name="EntitySpecification" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class that is used to define the invariant characteristics
(attributes, methods, constraints, and relationships) of a managed entity.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Specification">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ErrorMessage -->
   <xs:element name="ErrorMessage" type="prov:ErrorMessage"/>
   <xs:complexType name="ErrorMessage">
      <xs:sequence>
         <xs:element name="ErrorMessageCategory" type="xs:string" minOccurs="0"/>
         <xs:element name="ErrorMessageName" type="xs:string" minOccurs="0"/>
```

```
            <xs:element name="ErrorMesssageText" type="xs:string" minOccurs="0"/>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.FilterCriteria -->
      <xs:element name="FilterCriteria" type="prov:FilterCriteria"/>
      <xs:complexType name="FilterCriteria">
         <xs:sequence>
            <xs:element name="capabilityName" type="xs:string" minOccurs="0"/>
            <xs:element name="deviceName" type="xs:string" minOccurs="0"/>
            <xs:element name="geographicSiteId" type="xs:string" minOccurs="0"/>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.GeographicAddress -->
      <xs:element name="GeographicAddress" type="prov:GeographicAddress" abstract="true"/>
      <xs:complexType name="GeographicAddress" abstract="true">
         <xs:annotation>
            <xs:documentation>
A structured textual way of describing how to find a Geographic Location. It is usually
composed of an ordered list of Geographic Location names based on context specific rules.
It is an abstract modeling concept that provides a linking point to other parts of the
SID model.It holds attributes common to all Geographic Address subclasses.
            </xs:documentation>
         </xs:annotation>
         <xs:complexContent>
            <xs:extension base="prov:AbstractGeographicAddress">
               <xs:sequence>
                  <xs:element name="country" type="xs:string" minOccurs="0">
                     <xs:annotation>
                        <xs:documentation>
the Country that the address is in
                        </xs:documentation>
                     </xs:annotation>
                  </xs:element>
                  <xs:element name="stateOrProvince" type="xs:string" minOccurs="0">
                     <xs:annotation>
                        <xs:documentation>
the State that the Address is in
                        </xs:documentation>
```

```
                  </xs:annotation>
               </xs:element>
               <xs:element name="TimeZone" type="prov:TimeZone" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.GeographicPlace -->
   <xs:element name="GeographicPlace" type="prov:GeographicPlace" abstract="true"/>
   <xs:complexType name="GeographicPlace" abstract="true">
      <xs:annotation>
         <xs:documentation>
Allows us to determine where things are in relation to the earth&amp;apos;s surface.It is an
abstract modeling concept that provides a linking point to other parts of the SID model.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Place">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.GeographicSite -->
   <xs:element name="GeographicSite" type="prov:GeographicSite"/>
   <xs:complexType name="GeographicSite">
      <xs:annotation>
         <xs:documentation>
A convenience class that allows us to easily refer to Places important to the Service
Provider
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:GeographicPlace">
            <xs:sequence>
              <xs:element name="GeographicSiteContactableVia" type="prov:ContactMedium"
minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
```

```
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.GetListResultsContext -->
   <xs:element name="GetListResultsContext" type="prov:GetListResultsContext"/>
   <xs:complexType name="GetListResultsContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
             <xs:element name="GetListResultsRequest" type="prov:GetListResultsRequest"
minOccurs="0"/>
           <xs:element name="GetListResultsResponse" type="prov:GetListResultsResponse"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.GetListResultsRequest -->
   <xs:element name="GetListResultsRequest" type="prov:GetListResultsRequest"/>
   <xs:complexType name="GetListResultsRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="correlationId" type="xs:string" minOccurs="0"/>
               <xs:element name="maxResults"  minOccurs="0">
                  <xs:simpleType>
                     <xs:restriction base="xs:integer">
                        <xs:minInclusive value="1"/>
                     </xs:restriction>
                  </xs:simpleType>
               </xs:element>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.GetListResultsResponse -->
   <xs:element name="GetListResultsResponse" type="prov:GetListResultsResponse"/>
   <xs:complexType name="GetListResultsResponse">
      <xs:complexContent>
```

```
            <xs:extension base="prov:OperationResponse">
               <xs:sequence>
                  <xs:element name="moreResults" type="xs:boolean" minOccurs="0"/>
                  <xs:element name="Result" type="prov:Entity" minOccurs="0"
maxOccurs="unbounded"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.GetStatusContext -->
      <xs:element name="GetStatusContext" type="prov:GetStatusContext"/>
      <xs:complexType name="GetStatusContext">
         <xs:complexContent>
            <xs:extension base="prov:Context">
               <xs:sequence>
                  <xs:element name="GetStatusRequest" type="prov:GetStatusRequest"
minOccurs="0"/>
                  <xs:element name="GetStatusResponse" type="prov:GetStatusResponse"
minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.GetStatusRequest -->
      <xs:element name="GetStatusRequest" type="prov:GetStatusRequest"/>
      <xs:complexType name="GetStatusRequest">
         <xs:complexContent>
            <xs:extension base="prov:OperationRequest">
               <xs:sequence>
                  <xs:element name="CorrelationId" type="xs:string" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.GetStatusResponse -->
      <xs:element name="GetStatusResponse" type="prov:GetStatusResponse"/>
      <xs:complexType name="GetStatusResponse">
         <xs:complexContent>
```

```
            <xs:extension base="prov:OperationResponse">
               <xs:sequence>
                  <xs:element name="status" type="prov:ResultStatusEnum" minOccurs="0"/>
                  <xs:element name="statusMessage" type="xs:string" minOccurs="0"/>
                  <xs:element name="Result" type="prov:Entity" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.IPAddress -->
      <xs:element name="IPAddress" type="prov:IPAddress"/>
      <xs:complexType name="IPAddress">
         <xs:annotation>
            <xs:documentation>
This class represents an IP address. It can be either in v4 or v6 form, and can be
formatted as dotted decimal or CIDR. One or more host aliases can also be supplied.
            </xs:documentation>
         </xs:annotation>
         <xs:complexContent>
            <xs:extension base="prov:NetworkAddress">
               <xs:sequence>
                  <xs:element name="hostNumber" type="xs:string" minOccurs="0">
                     <xs:annotation>
                        <xs:documentation>
This contains the host number portion of the IP Address.
                        </xs:documentation>
                     </xs:annotation>
                  </xs:element>
                  <xs:element name="networkNumber" type="xs:string" minOccurs="0">
                     <xs:annotation>
                        <xs:documentation>
This contains the network number portion of the IP Address.
                        </xs:documentation>
                     </xs:annotation>
                  </xs:element>
                  <xs:element name="subnetMask" type="xs:string" minOccurs="0">
                     <xs:annotation>
                        <xs:documentation>
```

```
This is a string attribute that defines the subnet mask for the IP Address of this
instance. The IP Address is constructed by concatenating the networkNumber and the
hostNumber, forming a dotted decimal IP Address. The subnetMask is formatted according
to the appropriate convention as defined in the addressFormat attribute of this object.
                    </xs:documentation>
                </xs:annotation>
             </xs:element>
          </xs:sequence>
       </xs:extension>
    </xs:complexContent>
 </xs:complexType>
 <!-- The type: com.cisco.nm.ms2.hcs.provision.Individual -->
 <xs:element name="Individual" type="prov:Individual"/>
 <xs:complexType name="Individual">
    <xs:complexContent>
       <xs:extension base="prov:Party">
          <xs:sequence>
             <xs:element name="IndividualINamedUsing" type="prov:IndividualName"
minOccurs="0" maxOccurs="unbounded"/>
          </xs:sequence>
       </xs:extension>
    </xs:complexContent>
 </xs:complexType>
 <!-- The type: com.cisco.nm.ms2.hcs.provision.IndividualName -->
 <xs:element name="IndividualName" type="prov:IndividualName"/>
 <xs:complexType name="IndividualName">
    <xs:annotation>
       <xs:documentation>
A word, term, or phrase by which an individual is known and distinguished from other
individuals.A name is an informal way of identifying an object [Fowler]This entity allows
for international naming variations. An IndividualName is a type of PartyName.
       </xs:documentation>
    </xs:annotation>
    <xs:complexContent>
       <xs:extension base="prov:PartyName">
          <xs:sequence>
             <xs:element name="givenNames" type="xs:string" minOccurs="0"/>
             <xs:element name="familyNames" type="xs:string" minOccurs="0">
                <xs:annotation>
```

```
                        <xs:documentation>
Contains the non-chosen or inherited name. Also known as a person&amp;apos;s last name in the
Western context.
                        </xs:documentation>
                     </xs:annotation>
                  </xs:element>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.Language -->
      <xs:element name="Language" type="prov:Language"/>
      <xs:complexType name="Language">
         <xs:annotation>
            <xs:documentation>
Represents a spoken and/or written language.
            </xs:documentation>
         </xs:annotation>
         <xs:sequence>
            <xs:element name="dialectNames" type="xs:string" minOccurs="0">
               <xs:annotation>
                  <xs:documentation>
A list of the dialects of the language
                  </xs:documentation>
               </xs:annotation>
            </xs:element>
            <xs:element name="name" type="xs:string" minOccurs="0"/>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.LanguageAbility -->
      <xs:element name="LanguageAbility" type="prov:LanguageAbility"/>
      <xs:complexType name="LanguageAbility">
         <xs:annotation>
            <xs:documentation>
Represents the ability of a Party to understand or converse in a Language
            </xs:documentation>
         </xs:annotation>
         <xs:sequence>
```

```
            <xs:element name="LanguageAbilityIn" type="prov:Language" minOccurs="0"/>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.ListCustomerContext -->
      <xs:element name="ListCustomerContext" type="prov:ListCustomerContext"/>
      <xs:complexType name="ListCustomerContext">
         <xs:complexContent>
            <xs:extension base="prov:Context">
               <xs:sequence>
                  <xs:element name="ListCustomerResponse" type="prov:ListCustomerResponse"
minOccurs="0"/>
                   <xs:element name="ListCustomerRequest" type="prov:ListCustomerRequest"
minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.ListCustomerRequest -->
      <xs:element name="ListCustomerRequest" type="prov:ListCustomerRequest"/>
      <xs:complexType name="ListCustomerRequest">
         <xs:complexContent>
            <xs:extension base="prov:OperationRequest">
               <xs:sequence>
                  <xs:element name="Customer" type="prov:Customer" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.ListCustomerResponse -->
      <xs:element name="ListCustomerResponse" type="prov:ListCustomerResponse"/>
      <xs:complexType name="ListCustomerResponse">
         <xs:complexContent>
            <xs:extension base="prov:OperationResponse">
               <xs:sequence>
                  <xs:element name="Customers" type="prov:Customer" minOccurs="0"
maxOccurs="unbounded"/>
               </xs:sequence>
            </xs:extension>
```

```
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListDeviceContext -->
   <xs:element name="ListDeviceContext" type="prov:ListDeviceContext"/>
   <xs:complexType name="ListDeviceContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="ListDeviceResponse" type="prov:ListDeviceResponse"
minOccurs="0"/>
               <xs:element name="ListDeviceRequest" type="prov:ListDeviceRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListDeviceRequest -->
   <xs:element name="ListDeviceRequest" type="prov:ListDeviceRequest"/>
   <xs:complexType name="ListDeviceRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
            <xs:element name="PhysicalDevice" type="prov:PhysicalDevice" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListDeviceResponse -->
   <xs:element name="ListDeviceResponse" type="prov:ListDeviceResponse"/>
   <xs:complexType name="ListDeviceResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListInfrastructureProductContext -->
```

```
   <xs:element name="ListInfrastructureProductContext"
type="prov:ListInfrastructureProductContext"/>
   <xs:complexType name="ListInfrastructureProductContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="ListInfrastructureProductResponse"
type="prov:ListInfrastructureProductResponse" minOccurs="0"/>
               <xs:element name="ListInfrastructureProductRequest"
type="prov:ListInfrastructureProductRequest" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListInfrastructureProductRequest -->
   <xs:element name="ListInfrastructureProductRequest"
type="prov:ListInfrastructureProductRequest"/>
   <xs:complexType name="ListInfrastructureProductRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="Product" type="prov:Product" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListInfrastructureProductResponse -->
   <xs:element name="ListInfrastructureProductResponse"
type="prov:ListInfrastructureProductResponse"/>
   <xs:complexType name="ListInfrastructureProductResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListOperationRequest -->
   <xs:element name="ListOperationRequest" type="prov:ListOperationRequest"/>
   <xs:complexType name="ListOperationRequest">
```

```
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="maxResults" type="xs:int" minOccurs="0"/>
               <xs:element name="startFromResultNumber" type="xs:int" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListOperationResponse -->
   <xs:element name="ListOperationResponse" type="prov:ListOperationResponse"/>
   <xs:complexType name="ListOperationResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence>
               <xs:element name="moreResults" type="xs:boolean" minOccurs="0"/>
               <xs:element name="endsWithResultNumber" type="xs:int" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListOrderContext -->
   <xs:element name="ListOrderContext" type="prov:ListOrderContext"/>
   <xs:complexType name="ListOrderContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="ListOrderResponse" type="prov:ListOrderResponse"
minOccurs="0"/>
               <xs:element name="ListOrderRequest" type="prov:ListOrderRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListOrderRequest -->
   <xs:element name="ListOrderRequest" type="prov:ListOrderRequest"/>
   <xs:complexType name="ListOrderRequest">
```

```
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="ProductOrder" type="prov:ProductOrder" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListOrderResponse -->
   <xs:element name="ListOrderResponse" type="prov:ListOrderResponse"/>
   <xs:complexType name="ListOrderResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type:
com.cisco.nm.ms2.hcs.provision.ListProductSpecCharacteristicValuesContext -->
   <xs:element name="ListProductSpecCharacteristicValuesContext"
type="prov:ListProductSpecCharacteristicValuesContext"/>
   <xs:complexType name="ListProductSpecCharacteristicValuesContext">
      <xs:complexContent>
         <xs:extension base="prov:ProductCatalogContext">
            <xs:sequence>
               <xs:element name="ListProductSpecCharacteristicValuesRequest"
type="prov:ListProductSpecCharacteristicValuesRequest" minOccurs="0"/>
               <xs:element name="ListProductSpecCharacteristicValuesResponse"
type="prov:ListProductSpecCharacteristicValuesResponse" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type:
com.cisco.nm.ms2.hcs.provision.ListProductSpecCharacteristicValuesRequest -->
   <xs:element name="ListProductSpecCharacteristicValuesRequest"
type="prov:ListProductSpecCharacteristicValuesRequest"/>
   <xs:complexType name="ListProductSpecCharacteristicValuesRequest">
      <xs:complexContent>
```

```
         <xs:extension base="prov:ProductCatalogRequest">
            <xs:sequence>
               <xs:element name="ProductSpecCharacteristicIds" type="xs:string"
minOccurs="0" maxOccurs="unbounded"/>
              <xs:element name="ProductSpecification" type="prov:ProductSpecification"
minOccurs="0"/>
            <xs:element name="FilterCriteria" type="prov:FilterCriteria" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type:
com.cisco.nm.ms2.hcs.provision.ListProductSpecCharacteristicValuesResponse -->
   <xs:element name="ListProductSpecCharacteristicValuesResponse"
type="prov:ListProductSpecCharacteristicValuesResponse"/>
   <xs:complexType name="ListProductSpecCharacteristicValuesResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSiteContext -->
   <xs:element name="ListSiteContext" type="prov:ListSiteContext"/>
   <xs:complexType name="ListSiteContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="ListSiteResponse" type="prov:ListSiteResponse"
minOccurs="0"/>
               <xs:element name="ListSiteRequest" type="prov:ListSiteRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSiteRequest -->
   <xs:element name="ListSiteRequest" type="prov:ListSiteRequest"/>
   <xs:complexType name="ListSiteRequest">
```

```
      <xs:complexContent>
         <xs:extension base="prov:ListOperationRequest">
            <xs:sequence>
            <xs:element name="GeographicSite" type="prov:GeographicSite" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSiteResponse -->
   <xs:element name="ListSiteResponse" type="prov:ListSiteResponse"/>
   <xs:complexType name="ListSiteResponse">
      <xs:complexContent>
         <xs:extension base="prov:ListOperationResponse">
            <xs:sequence>
             <xs:element name="GeographicSite" type="prov:GeographicSite" minOccurs="0"
maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSubscriberContext -->
   <xs:element name="ListSubscriberContext" type="prov:ListSubscriberContext"/>
   <xs:complexType name="ListSubscriberContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
           <xs:element name="ListSubscriberResponse" type="prov:ListSubscriberResponse"
minOccurs="0"/>
             <xs:element name="ListSubscriberRequest" type="prov:ListSubscriberRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSubscriberProductContext -->
   <xs:element name="ListSubscriberProductContext"
type="prov:ListSubscriberProductContext"/>
   <xs:complexType name="ListSubscriberProductContext">
      <xs:complexContent>
```

```
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="ListSubscriberProductRequest"
type="prov:ListSubscriberProductRequest" minOccurs="0"/>
               <xs:element name="ListSubscriberProductResponse"
type="prov:ListSubscriberProductResponse" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSubscriberProductRequest -->
   <xs:element name="ListSubscriberProductRequest"
type="prov:ListSubscriberProductRequest"/>
   <xs:complexType name="ListSubscriberProductRequest">
      <xs:complexContent>
         <xs:extension base="prov:ListOperationRequest">
            <xs:sequence>
               <xs:element name="Product" type="prov:Product" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSubscriberProductResponse -->
   <xs:element name="ListSubscriberProductResponse"
type="prov:ListSubscriberProductResponse"/>
   <xs:complexType name="ListSubscriberProductResponse">
      <xs:complexContent>
         <xs:extension base="prov:ListOperationResponse">
            <xs:sequence>
               <xs:element name="Product" type="prov:Product" minOccurs="0"
maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSubscriberRequest -->
   <xs:element name="ListSubscriberRequest" type="prov:ListSubscriberRequest"/>
   <xs:complexType name="ListSubscriberRequest">
      <xs:complexContent>
```

```
            <xs:extension base="prov:ListOperationRequest">
               <xs:sequence>
                  <xs:element name="Subscriber" type="prov:Subscriber" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.ListSubscriberResponse -->
      <xs:element name="ListSubscriberResponse" type="prov:ListSubscriberResponse"/>
      <xs:complexType name="ListSubscriberResponse">
         <xs:complexContent>
            <xs:extension base="prov:ListOperationResponse">
               <xs:sequence>
                  <xs:element name="Subscriber" type="prov:Subscriber" minOccurs="0"
maxOccurs="unbounded"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.LogicalDevice -->
      <xs:element name="LogicalDevice" type="prov:LogicalDevice"/>
      <xs:complexType name="LogicalDevice">
         <xs:annotation>
            <xs:documentation>
This is an abstract base class for representing logical concepts and services that can
be managed that are associated with the device as a whole. This class represents a
convenient aggregation point for combining different aspects of a device (e.g., software
contained in the device, protocols that the devices runs, the set of services that it
offers, and so forth). It also enables the device itself to have a single logical
manifestation.


Conceptually, this represents the &amp;quot;brains&amp;quot; of the Device. For example, it
represents the set of entities required for a Router to know how to route packets.


Please see the DEN-ng Resource model for more details.
            </xs:documentation>
         </xs:annotation>
         <xs:complexContent>
            <xs:extension base="prov:LogicalResource">
               <xs:sequence/>
```

```
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.LogicalPhysicalResource -->
   <xs:element name="LogicalPhysicalResource" type="prov:LogicalPhysicalResource"/>
   <xs:complexType name="LogicalPhysicalResource">
      <xs:annotation>
         <xs:documentation>
This is an associationClass defined in the DEN-ng Logical Resource model. It represents
the semantics (e.g., depends on, uses, and other relationships) that exist when one or
more LogicalResources are used to support a PhysicalResource.


This class should be extended to model the particular semantics involved. When extended,
the typeOfDependency attribute must be included, since it is a mandatory attribute.
However, new values may be added to its enumerated list of values.


Please see the DEN-ng Resource model for more details.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Entity">
            <xs:sequence>
               <xs:element name="typeOfLPDependency" type="xs:string" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
This is the only mandatory attribute in this class, and is an enumerated integer that
defines how the PhysicalResource supports the LogicalResource. Values include:


  0:  Unknown
  1: Hardware Must Be Present
  2:  Hardware Must Not Be Present
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
               <xs:element name="LogicalResource" type="prov:LogicalResource"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
```

```
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.LogicalResource -->
   <xs:element name="LogicalResource" type="prov:LogicalResource"/>
   <xs:complexType name="LogicalResource">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class for describing different logical aspects of devices (e.g.,
DeviceInterfaces) that constitute a Product. It has two main purposes: (1) to collect
common attributes and relationships for all logical entities, and (2) to provide a
convenient, single point where relationships with other managed objects can be defined.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Resource">
            <xs:sequence>
               <xs:element name="SupportsProtocol" type="prov:Protocol" minOccurs="0"
maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ManagedEntity -->
   <xs:element name="ManagedEntity" type="prov:ManagedEntity" abstract="true"/>
   <xs:complexType name="ManagedEntity" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class that is used to represent entities in a managed environment
that have the following semantics in common: (1) a ManagedBusinessEntity owns or is
otherwise responsible for them, (2) management of the entity is critical for providing a
service and/or maintaining the environment, and (3) the entity is &amp;quot;important&amp;quot;
from a management point-of-view. As such, it is a point at which semantically important
relationships can be created; this avoids duplicating these relationships on multiple
subclasses as well as forcing ManagedObject to support these relationships.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Entity">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
```

```
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.NetworkAddress -->
   <xs:element name="NetworkAddress" type="prov:NetworkAddress" abstract="true"/>
   <xs:complexType name="NetworkAddress" abstract="true">
      <xs:annotation>
         <xs:documentation>
This class represents the generic concept of a network address. Its subclasses define
different types of addresses of different technologies, such as an IPAddress vs. an
IPXAddress. Its utility lies in its ability to serve as a convenient point for sourcing
and terminating relationships. This eliminates undue duplication of relationships that
interact with the subclasses of NetworkAddress.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:LogicalResource">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.OperationRequest -->
   <xs:element name="OperationRequest" type="prov:OperationRequest" abstract="true"/>
   <xs:complexType name="OperationRequest" abstract="true">
      <xs:sequence>
         <xs:element name="RequestHeader" type="prov:RequestHeader"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.OperationResponse -->
   <xs:element name="OperationResponse" type="prov:OperationResponse"/>
   <xs:complexType name="OperationResponse">
      <xs:sequence>
         <xs:element name="CorrelationId" type="xs:string" minOccurs="0"/>
         <xs:element name="ErrorMessage" type="prov:ErrorMessage" minOccurs="0"
maxOccurs="unbounded"/>
         <xs:element name="isSuccessful" type="xs:boolean" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.OrderItemCorrelation -->
   <xs:element name="OrderItemCorrelation" type="prov:OrderItemCorrelation"/>
   <xs:complexType name="OrderItemCorrelation">
```

```
      <xs:sequence>
         <xs:element name="correlationId" type="xs:string" minOccurs="0"/>
         <xs:element name="orderItemNumber" type="xs:string" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.OrganizationPost -->
   <xs:element name="OrganizationPost" type="prov:OrganizationPost"/>
   <xs:complexType name="OrganizationPost">
      <xs:annotation>
         <xs:documentation>
An OrganizationPost is a PartyRole that is used to model where a one or more employees
share a function.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:PartyRole">
            <xs:sequence>
               <xs:element name="jobTitle" type="xs:string" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Party -->
   <xs:element name="Party" type="prov:Party" abstract="true"/>
   <xs:complexType name="Party" abstract="true">
      <xs:annotation>
         <xs:documentation>
Represents an  individual, organization or organization unit.Party is an abstract concept
that should be used in places where the business says something can be an organization ,
organization unit or an individual
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="PartyHas" type="prov:LanguageAbility" minOccurs="0"
maxOccurs="unbounded"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PartyInteractionRole -->
   <xs:element name="PartyInteractionRole" type="prov:PartyInteractionRole"/>
```

```
   <xs:complexType name="PartyInteractionRole">
      <xs:annotation>
         <xs:documentation>
A Party playing a role in a Business Interaction.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:BusinessInteractionRole">
            <xs:sequence>
              <xs:element name="PartyInteractionRoleIdentifiedBy" type="prov:PartyRole"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PartyName -->
   <xs:element name="PartyName" type="prov:PartyName" abstract="true"/>
   <xs:complexType name="PartyName" abstract="true">
      <xs:annotation>
         <xs:documentation>
A word, term, or phrase by which a party (individual or organization) is known and
distinguished from other parties.A name is an informal way of identifying an object
[Fowler].PartyName is an abstract concept that should be used in places where the business
refers to an organization name, organization unit name or individual name
         </xs:documentation>
      </xs:annotation>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PartyRole -->
   <xs:element name="PartyRole" type="prov:PartyRole" abstract="true"/>
   <xs:complexType name="PartyRole" abstract="true">
      <xs:annotation>
         <xs:documentation>
The part played by a party in a given context with any characteristics, such as expected
pattern of behavior, attributes, and/or associations that it entails.PartyRole is an
abstract concept that should be used in places where the business refers to a Party
playing a Role
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Entity">
```

```
            <xs:sequence>
               <xs:element name="partyRoleId" type="xs:string" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
Unique identifier for PartyRoles
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
               <xs:element name="PartyRoleContactableVia" type="prov:ContactMedium"
minOccurs="0" maxOccurs="unbounded"/>
              <xs:element name="PartyRoleAssociation" type="prov:PartyRoleAssociation"
minOccurs="0" maxOccurs="unbounded"/>
               <xs:element name="Party" type="prov:Party" minOccurs="0"/>
               <xs:element name="status" type="prov:PartyRoleStatusEnum" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
used to track the lifecycle status, e.g. existing, prospective or former customers.
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
               <xs:element name="Password" type="prov:Password" minOccurs="0"
maxOccurs="unbounded"/>
               <xs:element name="AuthorizedProductSpecification"
type="prov:ProductSpecification" minOccurs="0" maxOccurs="unbounded"/>
               <xs:element name="validFor" type="prov:TimePeriod" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
the time period that the PartyRole is valid for
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
               <xs:element name="PlacePartyRoleAssoc" type="prov:PlacePartyRoleAssoc"
minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PartyRoleAssociation -->
   <xs:element name="PartyRoleAssociation" type="prov:PartyRoleAssociation"/>
```

```
   <xs:complexType name="PartyRoleAssociation">
      <xs:annotation>
         <xs:documentation>
Allows PartyRoles to be associated Note that Interaction must be used for associations
that are a direct part of the value network
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="associationType" type="xs:string" minOccurs="0"/>
         <xs:element name="PartyRole" type="prov:PartyRole" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PartyRoleProductInvolvement -->
   <xs:element name="PartyRoleProductInvolvement"
type="prov:PartyRoleProductInvolvement"/>
   <xs:complexType name="PartyRoleProductInvolvement">
      <xs:annotation>
         <xs:documentation>
A PartyRole involved with a Product.  The involvement may be a subscriber, lessor, owner,
and so forth.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:ProductInvolvementRole">
            <xs:sequence>
               <xs:element name="PartyRole" type="prov:PartyRole" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PartyRoleStatusEnum -->
   <xs:simpleType name="PartyRoleStatusEnum">
      <xs:restriction base="xs:string">
         <xs:enumeration value="Activated"/>
         <xs:enumeration value="Requested"/>
         <xs:enumeration value="Deactivated"/>
      </xs:restriction>
   </xs:simpleType>
```

```
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Password -->
   <xs:element name="Password" type="prov:Password"/>
   <xs:complexType name="Password">
      <xs:sequence>
         <xs:element name="passwordHintAnswer" type="xs:string" minOccurs="0"/>
         <xs:element name="passwordType" type="xs:string" minOccurs="0"/>
         <xs:element name="passwordValue" type="xs:string" minOccurs="0"/>
         <xs:element name="passwordHint" type="xs:string" minOccurs="0"/>
         <xs:element name="validFor" type="prov:TimePeriod" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PhysicalDevice -->
   <xs:element name="PhysicalDevice" type="prov:PhysicalDevice"/>
   <xs:complexType name="PhysicalDevice">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class for representing hardware devices that can be managed.
This class represents a convenient aggregation point for combining different aspects of
a device (e.g., the cables, connectors, cards, power supplies, and other objects that
together make up the device). Thus, it enables the device itself to have a physical
manifestation (e.g., the &amp;quot;Internet Gateway Router&amp;quot; can be identified as a
PhysicalDevice). Examples of this class include routers and switches, computers, and
other end-devices that are managed.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:PhysicalResource">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PhysicalDeviceSpecification -->
   <xs:element name="PhysicalDeviceSpecification"
type="prov:PhysicalDeviceSpecification"/>
   <xs:complexType name="PhysicalDeviceSpecification">
      <xs:annotation>
         <xs:documentation>
This is a concrete class for describing specific attributes, behavior, relationships,
constraints, and semantics for building PhysicalDevice objects.
         </xs:documentation>
```

```
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:PhysicalResourceSpec">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PhysicalResource -->
   <xs:element name="PhysicalResource" type="prov:PhysicalResource" abstract="true"/>
   <xs:complexType name="PhysicalResource" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class for describing different types of hardware that constitute
a Product. It has two main purposes: (1) to collect common attributes and relationships
for all hardware, and (2) to provide a convenient, single point where relationships with
other managed objects can be defined.


The HasWarrantyInfo association (not shown) describes warranty information of hardware.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Resource">
            <xs:sequence>
               <xs:element name="LogicalPhysicalResource"
type="prov:LogicalPhysicalResource" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PhysicalResourceSpec -->
   <xs:element name="PhysicalResourceSpec" type="prov:PhysicalResourceSpec"
abstract="true"/>
   <xs:complexType name="PhysicalResourceSpec" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class that is used to define the invariant characteristics and
behavior (attributes, methods, constraints, and relationships) of a PhysicalResource.
         </xs:documentation>
      </xs:annotation>
```

```
      <xs:complexContent>
         <xs:extension base="prov:ResourceSpecification">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Place -->
   <xs:element name="Place" type="prov:Place" abstract="true"/>
   <xs:complexType name="Place" abstract="true">
      <xs:annotation>
         <xs:documentation>
Place answers the question &amp;quot;where ?&amp;quot;It is an abstract modeling concept that
provides a linking point to other parts of the SID model.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Entity">
            <xs:sequence>
               <xs:element name="ID" type="xs:string" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
Unique identifier for Place
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
               <xs:element name="PlacePartyRoleAssoc" type="prov:PlacePartyRoleAssoc"
minOccurs="0" maxOccurs="unbounded"/>
               <xs:element name="PlaceResourceAssoc" type="prov:PlaceResourceAssoc"
minOccurs="0" maxOccurs="unbounded"/>
               <xs:element name="AuthorizedProductSpecification"
type="prov:ProductSpecification" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.PlacePartyRoleAssoc -->
   <xs:element name="PlacePartyRoleAssoc" type="prov:PlacePartyRoleAssoc"/>
   <xs:complexType name="PlacePartyRoleAssoc">
      <xs:annotation>
```

```
            <xs:documentation>
This is an example of an association linking Place to another part of the SID model.
            </xs:documentation>
         </xs:annotation>
         <xs:sequence>
            <xs:element name="placeRole" type="xs:string" minOccurs="0">
               <xs:annotation>
                  <xs:documentation>
the role that the place plays in the association
                  </xs:documentation>
               </xs:annotation>
            </xs:element>
            <xs:element name="PartyRole" type="prov:PartyRole" minOccurs="0"/>
            <xs:element name="Place" type="prov:Place" minOccurs="0"/>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.PlaceResourceAssoc -->
      <xs:element name="PlaceResourceAssoc" type="prov:PlaceResourceAssoc"/>
      <xs:complexType name="PlaceResourceAssoc">
         <xs:sequence>
           <xs:element name="modifier" type="prov:CharacteristicActionEnum" minOccurs="0"/>
            <xs:element name="placeRole" type="xs:string" minOccurs="0"/>
            <xs:element name="Resource" type="prov:Resource" minOccurs="0"/>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.PostalContact -->
      <xs:element name="PostalContact" type="prov:PostalContact"/>
      <xs:complexType name="PostalContact">
         <xs:complexContent>
            <xs:extension base="prov:ContactMedium">
               <xs:sequence>
                  <xs:element name="AbstractGeographicAddress"
type="prov:AbstractGeographicAddress" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.Product -->
```

```
   <xs:element name="Product" type="prov:Product"/>
   <xs:complexType name="Product">
      <xs:annotation>
         <xs:documentation>
A ProductOffering procured by a Customer, or other interested Party playing a PartyRole,
appearing as a BusinessInteractionItem, which could take the form of a Agreement.
ProductSpecificationCharacteristic(s) in part define the Product.  A Product is realized
as one or more Service(s) and/or Resource(s).
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:Entity">
            <xs:sequence>
               <xs:element name="ProductLocatedVia" type="prov:Place" minOccurs="0"
maxOccurs="unbounded"/>
               <xs:element name="ProductCharacteristicValue"
type="prov:ProductCharacteristicValue" minOccurs="0" maxOccurs="unbounded"/>
              <xs:element name="ProductSpecification" type="prov:ProductSpecification"
minOccurs="0"/>
             <xs:element name="ProductOfInterestTo" type="prov:ProductInvolvementRole"
minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductCatalogContext -->
   <xs:element name="ProductCatalogContext" type="prov:ProductCatalogContext"/>
   <xs:complexType name="ProductCatalogContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductCatalogRequest -->
   <xs:element name="ProductCatalogRequest" type="prov:ProductCatalogRequest"
abstract="true"/>
   <xs:complexType name="ProductCatalogRequest" abstract="true">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
         </xs:extension>
```

```
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductCharacteristicValue -->
   <xs:element name="ProductCharacteristicValue"
type="prov:ProductCharacteristicValue"/>
   <xs:complexType name="ProductCharacteristicValue">
      <xs:annotation>
         <xs:documentation>
A value of a ProductSpecCharacteristic chosen for a Product that further defines what the
Product is.
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="value" type="xs:string" minOccurs="0" maxOccurs="unbounded">
            <xs:annotation>
               <xs:documentation>
A fact that describes a Product.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
         <xs:element name="ProductCharacteristicValueRelationship"
type="prov:ProductCharacteristicValueRelationship" minOccurs="0"
maxOccurs="unbounded"/>
         <xs:element name="ProdSpecCharDescribesProdCharacteristicValue"
type="prov:ProductSpecCharacteristic" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductCharacteristicValueRelationship
-->
   <xs:element name="ProductCharacteristicValueRelationship"
type="prov:ProductCharacteristicValueRelationship"/>
   <xs:complexType name="ProductCharacteristicValueRelationship">
      <xs:sequence>
         <xs:element name="ProductCharacteristicValue"
type="prov:ProductCharacteristicValue" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductInvolvementRole -->
   <xs:element name="ProductInvolvementRole" type="prov:ProductInvolvementRole"
abstract="true"/>
```

```
   <xs:complexType name="ProductInvolvementRole" abstract="true">
      <xs:annotation>
         <xs:documentation>
A role a Party or Resource plays in the relationship to a Product, such as a user,
subscriber, owner, and so forth.
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="productInvolvementRole" type="xs:string" minOccurs="0">
            <xs:annotation>
               <xs:documentation>
A part a Party or Resource plays in its involvement with a product.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductOrder -->
   <xs:element name="ProductOrder" type="prov:ProductOrder"/>
   <xs:complexType name="ProductOrder">
      <xs:annotation>
         <xs:documentation>
A type of order that are not governed by any industry committee.  Product Orders represent
orders that would typically originate at an end user.  Product Orders may spawn ASRs,
LSRs, or other PSRs in order to fill the end users request, if facility, equipment, or
plant assignments are not available for designing the requested Product.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:CustomerOrder">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductSpecCharUse -->
   <xs:element name="ProductSpecCharUse" type="prov:ProductSpecCharUse"/>
   <xs:complexType name="ProductSpecCharUse">
      <xs:annotation>
         <xs:documentation>
```

```
A use of the CharacteristicSpecification by an ProductSpecification to which addtional
properties apply.

         </xs:documentation>

      </xs:annotation>

      <xs:sequence>

         <xs:element name="ProductSpecCharacteristic"
type="prov:ProductSpecCharacteristic" minOccurs="0"/>

      </xs:sequence>

   </xs:complexType>

   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductSpecCharacteristic -->

   <xs:element name="ProductSpecCharacteristic" type="prov:ProductSpecCharacteristic"/>

   <xs:complexType name="ProductSpecCharacteristic">

      <xs:annotation>

         <xs:documentation>

A characteristic quality or distinctive feature of a ProductSpecification.  The
characteristic can be take on a discrete value, such as color, can take on a range of
values, (for example, sensitivity of 100-240 mV), or can be derived from a formula (for
example, usage time (hrs) = 30 - talk time *3).  Certain characteristics, such as color,
may be configured during the ordering or some other process.

         </xs:documentation>

      </xs:annotation>

      <xs:sequence>

         <xs:element name="ID" type="xs:string" minOccurs="0">

            <xs:annotation>

               <xs:documentation>

A unique identifier for the ProductSpecCharacteristic.

               </xs:documentation>

            </xs:annotation>

         </xs:element>

         <xs:element name="isKey" type="xs:boolean" minOccurs="0"/>

         <xs:element name="isUnmanaged" type="xs:boolean" minOccurs="0"/>

         <xs:element name="ProdSpecCharacteristicEnumeratedBy"
type="prov:ProductSpecCharacteristicValue" minOccurs="0" maxOccurs="unbounded"/>

         <xs:element name="name" type="xs:string" minOccurs="0">

            <xs:annotation>

               <xs:documentation>

A word, term, or phrase by which the characteristic is known and distinguished from
characteristics.

               </xs:documentation>

            </xs:annotation>
```

```
         </xs:element>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductSpecCharacteristicValue -->
   <xs:element name="ProductSpecCharacteristicValue"
type="prov:ProductSpecCharacteristicValue"/>
   <xs:complexType name="ProductSpecCharacteristicValue">
      <xs:annotation>
         <xs:documentation>
A number or text that can be assigned to a ProductSpecCharacteristic.
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="value" type="xs:string" minOccurs="0">
            <xs:annotation>
               <xs:documentation>
A discrete value that the characteristic can take on.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
         <xs:element name="maxCardinality" type="xs:string" minOccurs="0">
            <xs:annotation>
               <xs:documentation>
The maximum number of instances a CharacteristicValueEnumerand can take on.
               </xs:documentation>
            </xs:annotation>
         </xs:element>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProductSpecification -->
   <xs:element name="ProductSpecification" type="prov:ProductSpecification"/>
   <xs:complexType name="ProductSpecification">
      <xs:annotation>
         <xs:documentation>
A detailed description of a tangible or intangible object made available externally in
the form of a ProductOffering to Customers or other Parties playing a PartyRole.  A
ProductSpecification may consist of other ProductSpecifications supplied together as a
```

```
collection.  Members of the collection may be offered in their own right.
ProductSpecifications may also exist within groupings, such as ProductCategories,
ProductLines, and ProductTypes.

         </xs:documentation>

      </xs:annotation>

      <xs:complexContent>

         <xs:extension base="prov:Entity">

            <xs:sequence>

               <xs:element name="productId" type="xs:string" minOccurs="0">

                  <xs:annotation>

                     <xs:documentation>

An identification number assigned to uniquely identify the specification.

                     </xs:documentation>

                  </xs:annotation>

               </xs:element>

               <xs:element name="ProductSpecCharUse" type="prov:ProductSpecCharUse"
minOccurs="0" maxOccurs="unbounded"/>

            </xs:sequence>

         </xs:extension>

      </xs:complexContent>

   </xs:complexType>

   <!-- The type: com.cisco.nm.ms2.hcs.provision.Protocol -->

   <xs:element name="Protocol" type="prov:Protocol"/>

   <xs:complexType name="Protocol">

      <xs:annotation>

         <xs:documentation>

A Protocol is a formal set of rules and conventions that governs how two entities exchange
information (usually over one or more types of network media).


This is an abstract base class for representing Protocols that can be managed. This class
represents a convenient aggregation point for defining how Protocols are managed and used.


Please see the DEN-ng Service model for more details.

         </xs:documentation>

      </xs:annotation>

      <xs:complexContent>

         <xs:extension base="prov:LogicalResource">

            <xs:sequence/>

         </xs:extension>
```

```
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ProvisionAsyncResponseContext -->
   <xs:element name="ProvisionAsyncResponseContext"
type="prov:ProvisionAsyncResponseContext"/>
   <xs:complexType name="ProvisionAsyncResponseContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="GetStatusResponse" type="prov:GetStatusResponse"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Request -->
   <xs:element name="Request" type="prov:Request" abstract="true"/>
   <xs:complexType name="Request" abstract="true">
      <xs:annotation>
         <xs:documentation>
The act of asking that something be done that typically involves a Response.  Request is
a type of  Business Interaction.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:BusinessInteraction">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.RequestHeader -->
   <xs:element name="RequestHeader" type="prov:RequestHeader"/>
   <xs:complexType name="RequestHeader">
      <xs:sequence>
         <xs:element name="targetDomain" type="prov:TargetDomainEnum"/>
         <xs:element name="replyToName" type="xs:string" minOccurs="0"/>
      </xs:sequence>
   </xs:complexType>
```

```
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Resource -->
   <xs:element name="Resource" type="prov:Resource" abstract="true"/>
   <xs:complexType name="Resource" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is the abstract base class for all entities that are inherently manageable and make
up a Product. Examples which are not Manageable include legacy Hubs that don&apos;t
support any type of management protocol; rather, they must be manually managed. Entities
like Policy are of course manageable, but do not make up or are found packaged inside of
a Product.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:ManagedEntity">
            <xs:sequence>
             <xs:element name="ResourceSpecification" type="prov:ResourceSpecification"
minOccurs="0"/>
               <xs:element name="PartyRole" type="prov:PartyRole" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ResourceRoleProductInvolvement -->
   <xs:element name="ResourceRoleProductInvolvement"
type="prov:ResourceRoleProductInvolvement"/>
   <xs:complexType name="ResourceRoleProductInvolvement">
      <xs:annotation>
         <xs:documentation>
A ResourceRole involved with a Product.  The involvement may be a inventoried, such as a
SIM card, that was provided as the tangible incarnation of a Product.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:ProductInvolvementRole">
            <xs:sequence>
               <xs:element name="Resource" type="prov:Resource" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
```

```
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ResourceSpecification -->
   <xs:element name="ResourceSpecification" type="prov:ResourceSpecification"
abstract="true"/>
   <xs:complexType name="ResourceSpecification" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class that is used to define the invariant characteristics and
behavior (attributes, methods, constraints, and relationships) of a ManagedResource.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:EntitySpecification">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.ResultStatusEnum -->
   <xs:simpleType name="ResultStatusEnum">
      <xs:restriction base="xs:string">
         <xs:enumeration value="COMPLETED_FAILURE"/>
         <xs:enumeration value="COMPLETED_SUCCESSFULLY"/>
         <xs:enumeration value="PENDING"/>
         <xs:enumeration value="REJECTED"/>
         <xs:enumeration value="SUBMITTED"/>
      </xs:restriction>
   </xs:simpleType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.RootEntity -->
   <xs:element name="RootEntity" type="prov:RootEntity" abstract="true"/>
   <xs:complexType name="RootEntity" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is the top of the DEN-ng class hierarchy. These properties enable us to name,
describe, and identify all objects (manageable and unmanageable) in the environment.
         </xs:documentation>
      </xs:annotation>
      <xs:sequence>
         <xs:element name="commonName" type="xs:string" minOccurs="0">
            <xs:annotation>
```

```
                <xs:documentation>
This is a string, and represents a user-friendly identifier of an object. It is a
(possibly ambiguous) name by which the object is commonly known in some limited scope
(such as an organization) and conforms to the naming conventions of the country or culture
with which it is associated. It is NOT used as a naming attribute (i.e., to uniquely
identify an instance of the object). This is a REQUIRED attribute.
                </xs:documentation>
            </xs:annotation>
         </xs:element>
         <xs:element name="RootEntityDescribedBy" type="prov:CharacteristicValue"
minOccurs="0" maxOccurs="unbounded"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.RootEntityType -->
   <xs:element name="RootEntityType" type="prov:RootEntityType"/>
   <xs:complexType name="RootEntityType">
      <xs:sequence>
       <xs:element name="RootEntityTypeCategorizes" type="prov:RootEntity" minOccurs="0"
maxOccurs="unbounded"/>
      </xs:sequence>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.Specification -->
   <xs:element name="Specification" type="prov:Specification" abstract="true"/>
   <xs:complexType name="Specification" abstract="true">
      <xs:annotation>
         <xs:documentation>
This is an abstract base class that is used to define the invariant characteristics
(attributes, methods, and relationships) of a managed entity.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:RootEntity">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitInfrastructureOrderContext -->
   <xs:element name="SubmitInfrastructureOrderContext"
type="prov:SubmitInfrastructureOrderContext"/>
   <xs:complexType name="SubmitInfrastructureOrderContext">
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      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="SubmitInfrastructureOrderResponse"
type="prov:SubmitInfrastructureOrderResponse" minOccurs="0"/>
               <xs:element name="SubmitInfrastructureOrderRequest"
type="prov:SubmitInfrastructureOrderRequest" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitInfrastructureOrderRequest -->
   <xs:element name="SubmitInfrastructureOrderRequest"
type="prov:SubmitInfrastructureOrderRequest"/>
   <xs:complexType name="SubmitInfrastructureOrderRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
            <xs:element name="SubmitOption" type="prov:SubmitOptionEnum" minOccurs="0"/>
               <xs:element name="ProductOrder" type="prov:ProductOrder" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitInfrastructureOrderResponse -->
   <xs:element name="SubmitInfrastructureOrderResponse"
type="prov:SubmitInfrastructureOrderResponse"/>
   <xs:complexType name="SubmitInfrastructureOrderResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitOptionEnum -->
   <xs:simpleType name="SubmitOptionEnum">
      <xs:restriction base="xs:string">
         <xs:enumeration value="SubmitOnly"/>
         <xs:enumeration value="ValidateOnly"/>
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            <xs:enumeration value="ValidateAndSubmit"/>
         </xs:restriction>
      </xs:simpleType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitSubscriberOrderContext -->
      <xs:element name="SubmitSubscriberOrderContext"
type="prov:SubmitSubscriberOrderContext"/>
      <xs:complexType name="SubmitSubscriberOrderContext">
         <xs:complexContent>
            <xs:extension base="prov:Context">
               <xs:sequence>
                  <xs:element name="SubmitSubscriberOrderResponse"
type="prov:SubmitSubscriberOrderResponse" minOccurs="0"/>
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type="prov:SubmitSubscriberOrderRequest" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitSubscriberOrderRequest -->
      <xs:element name="SubmitSubscriberOrderRequest"
type="prov:SubmitSubscriberOrderRequest"/>
      <xs:complexType name="SubmitSubscriberOrderRequest">
         <xs:complexContent>
            <xs:extension base="prov:OperationRequest">
               <xs:sequence>
               <xs:element name="SubmitOption" type="prov:SubmitOptionEnum" minOccurs="0"/>
                  <xs:element name="ProductOrder" type="prov:ProductOrder" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitSubscriberOrderResponse -->
      <xs:element name="SubmitSubscriberOrderResponse"
type="prov:SubmitSubscriberOrderResponse"/>
      <xs:complexType name="SubmitSubscriberOrderResponse">
         <xs:complexContent>
            <xs:extension base="prov:OperationResponse">
               <xs:sequence>
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              <xs:element name="OrderItemCorrelation" type="prov:OrderItemCorrelation"
minOccurs="0" maxOccurs="unbounded"/>
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         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitTemplateContext -->
   <xs:element name="SubmitTemplateContext" type="prov:SubmitTemplateContext"/>
   <xs:complexType name="SubmitTemplateContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
           <xs:element name="SubmitTemplateResponse" type="prov:SubmitTemplateResponse"
minOccurs="0"/>
             <xs:element name="SubmitTemplateRequest" type="prov:SubmitTemplateRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitTemplateRequest -->
   <xs:element name="SubmitTemplateRequest" type="prov:SubmitTemplateRequest"/>
   <xs:complexType name="SubmitTemplateRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="TemplateName" type="xs:string" minOccurs="0"/>
            <xs:element name="SubmitOption" type="prov:SubmitOptionEnum" minOccurs="0"/>
            <xs:element name="PhysicalDevice" type="prov:PhysicalDevice" minOccurs="0"/>
               <xs:element name="KeywordCharacteristicValue"
type="prov:CharacteristicValue" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SubmitTemplateResponse -->
   <xs:element name="SubmitTemplateResponse" type="prov:SubmitTemplateResponse"/>
   <xs:complexType name="SubmitTemplateResponse">
      <xs:complexContent>
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            <xs:extension base="prov:OperationResponse">
               <xs:sequence/>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.Subscriber -->
      <xs:element name="Subscriber" type="prov:Subscriber"/>
      <xs:complexType name="Subscriber">
         <xs:complexContent>
            <xs:extension base="prov:PartyRole">
               <xs:sequence/>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.SyncCustomerContext -->
      <xs:element name="SyncCustomerContext" type="prov:SyncCustomerContext"/>
      <xs:complexType name="SyncCustomerContext">
         <xs:complexContent>
            <xs:extension base="prov:Context">
               <xs:sequence>
                  <xs:element name="SyncCustomerResponse" type="prov:SyncCustomerResponse"
minOccurs="0"/>
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minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.SyncCustomerRequest -->
      <xs:element name="SyncCustomerRequest" type="prov:SyncCustomerRequest"/>
      <xs:complexType name="SyncCustomerRequest">
         <xs:complexContent>
            <xs:extension base="prov:OperationRequest">
               <xs:sequence>
                  <xs:element name="SyncOption" type="prov:SyncOptionEnum" minOccurs="0"/>
                  <xs:element name="Customer" type="prov:Customer" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
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      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SyncCustomerResponse -->
   <xs:element name="SyncCustomerResponse" type="prov:SyncCustomerResponse"/>
   <xs:complexType name="SyncCustomerResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SyncDeviceContext -->
   <xs:element name="SyncDeviceContext" type="prov:SyncDeviceContext"/>
   <xs:complexType name="SyncDeviceContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="SyncDeviceResponse" type="prov:SyncDeviceResponse"
minOccurs="0"/>
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minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.SyncDeviceRequest -->
   <xs:element name="SyncDeviceRequest" type="prov:SyncDeviceRequest"/>
   <xs:complexType name="SyncDeviceRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="SyncOption" type="prov:SyncOptionEnum" minOccurs="0"/>
               <xs:element name="SyncScope" type="prov:SyncScopeEnum" minOccurs="0"/>
              <xs:element name="PhysicalDevice" type="prov:PhysicalDevice" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
```

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<!-- The type: com.cisco.nm.ms2.hcs.provision.SyncDeviceResponse -->
<xs:element name="SyncDeviceResponse" type="prov:SyncDeviceResponse"/>
<xs:complexType name="SyncDeviceResponse">
   <xs:complexContent>
      <xs:extension base="prov:OperationResponse">
         <xs:sequence/>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
<!-- The type: com.cisco.nm.ms2.hcs.provision.SyncOptionEnum -->
<xs:simpleType name="SyncOptionEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="PerformSync"/>
      <xs:enumeration value="GetSyncStatus"/>
   </xs:restriction>
</xs:simpleType>
<!-- The type: com.cisco.nm.ms2.hcs.provision.SyncScopeEnum -->
<xs:simpleType name="SyncScopeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="Subscriber"/>
      <xs:enumeration value="Infrastructure"/>
      <xs:enumeration value="Both"/>
   </xs:restriction>
</xs:simpleType>
<!-- The type: com.cisco.nm.ms2.hcs.provision.TargetDomainEnum -->
<xs:simpleType name="TargetDomainEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="Collaboration"/>
      <xs:enumeration value="ContactCenter"/>
      <xs:enumeration value="UnifiedCommunications"/>
   </xs:restriction>
</xs:simpleType>
<!-- The type: com.cisco.nm.ms2.hcs.provision.TelephoneNumber -->
<xs:element name="TelephoneNumber" type="prov:TelephoneNumber"/>
<xs:complexType name="TelephoneNumber">
   <xs:complexContent>
      <xs:extension base="prov:ContactMedium">
         <xs:sequence>
```

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                  <xs:element name="number" type="xs:string" minOccurs="0"/>
                  <xs:element name="type" type="xs:string" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.TimePeriod -->
      <xs:element name="TimePeriod" type="prov:TimePeriod"/>
      <xs:complexType name="TimePeriod">
         <xs:annotation>
            <xs:documentation>
A base / value business entity used to represent a period of time, between two timepoints
            </xs:documentation>
         </xs:annotation>
         <xs:sequence>
            <xs:element name="endDateTime" type="xs:dateTime" minOccurs="0">
               <xs:annotation>
                  <xs:documentation>
An instant of time, ending at the TimePeriod
                  </xs:documentation>
               </xs:annotation>
            </xs:element>
            <xs:element name="startDateTime" type="xs:dateTime" minOccurs="0">
               <xs:annotation>
                  <xs:documentation>
An instant of time, starting at the TimePeriod
                  </xs:documentation>
               </xs:annotation>
            </xs:element>
         </xs:sequence>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.TimeZone -->
      <xs:element name="TimeZone" type="prov:TimeZone"/>
      <xs:complexType name="TimeZone">
         <xs:sequence>
            <xs:element name="name" type="prov:timeZoneEnum" minOccurs="0"/>
            <xs:element name="location" type="prov:TimeZoneLocationEnum" minOccurs="0"/>
         </xs:sequence>
```

```
</xs:complexType>
<!-- The type: com.cisco.nm.ms2.hcs.provision.TimeZoneEnum -->
<xs:simpleType name="timeZoneEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="GMT-01:00, Azores (Azores)"/>
      <xs:enumeration value="GMT-02:00, Mid-Atlantic (Mid-Atlantic)"/>
      <xs:enumeration value="GMT-03:00, S. America Eastern (Brasilia)"/>
      <xs:enumeration value="GMT-03:00, S. America Eastern (Buenos Aires)"/>
      <xs:enumeration value="GMT-03:30, Newfoundland (Newfoundland)"/>
      <xs:enumeration value="GMT-04:00, Atlantic (Halifax)"/>
      <xs:enumeration value="GMT-04:00, S. America Western (Caracas)"/>
      <xs:enumeration value="GMT-05:00, Eastern (Indiana)"/>
      <xs:enumeration value="GMT-05:00, Eastern (New York)"/>
      <xs:enumeration value="GMT-05:00, S. America Pacific (Bogota)"/>
      <xs:enumeration value="GMT-06:00, Central (Chicago)"/>
      <xs:enumeration value="GMT-06:00, Central (Regina)"/>
      <xs:enumeration value="GMT-06:00, Mexico (Mexico City,Tegucigalpa)"/>
      <xs:enumeration value="GMT-07:00, Mountain (Arizona)"/>
      <xs:enumeration value="GMT-07:00, Mountain (Denver)"/>
      <xs:enumeration value="GMT-08:00, Pacific (San Jose)"/>
      <xs:enumeration value="GMT-09:00, Alaska (Ancorage)"/>
      <xs:enumeration value="GMT-10:00, Hawaii (Honolulu)"/>
      <xs:enumeration value="GMT-11:00, Samoa (Samoa)"/>
      <xs:enumeration value="GMT-12:00, Dateline (Eniwetok)"/>
      <xs:enumeration value="GMT+00:00, GMT (London)"/>
      <xs:enumeration value="GMT+00:00, Greenwich (Casablanca)"/>
      <xs:enumeration value="GMT+01:00, Europe (Amsterdam)"/>
      <xs:enumeration value="GMT+01:00, Europe (Berlin)"/>
      <xs:enumeration value="GMT+01:00, Europe (Paris)"/>
      <xs:enumeration value="GMT+01:00, Europe (Prague)"/>
      <xs:enumeration value="GMT+02:00, Eastern Europe (Bucharest)"/>
      <xs:enumeration value="GMT+02:00, Egypt (Cairo)"/>
      <xs:enumeration value="GMT+02:00, Greece (Athens)"/>
      <xs:enumeration value="GMT+02:00, Israel (Tel Aviv)"/>
      <xs:enumeration value="GMT+02:00, Northern Europe (Helsinki)"/>
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      <xs:enumeration value="GMT+03:00, Iran (Tehran)"/>
      <xs:enumeration value="GMT+03:00, Nairobi (Nairobi)"/>
```

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            <xs:enumeration value="GMT+03:00, Russian (Moscow)"/>
            <xs:enumeration value="GMT+03:00, Saudi Arabia (Baghdad)"/>
            <xs:enumeration value="GMT+04:00, Afghanistan (Kabul)"/>
            <xs:enumeration value="GMT+04:00, Arabian (Abu Dhabi, Muscat)"/>
            <xs:enumeration value="GMT+04:00, Baku (Baku)"/>
            <xs:enumeration value="GMT+05:00, West Asia (Ekaterinburg)"/>
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            <xs:enumeration value="GMT+05:30, India (Bombay)"/>
            <xs:enumeration value="GMT+06:00, Central Asia (Almaty)"/>
            <xs:enumeration value="GMT+06:00, Columbo (Columbo)"/>
            <xs:enumeration value="GMT+07:00, Bangkok (Bangkok)"/>
            <xs:enumeration value="GMT+08:00, Australia Western (Perth)"/>
            <xs:enumeration value="GMT+08:00, China (Beijing)"/>
            <xs:enumeration value="GMT+08:00, Singapore (Singapore)"/>
            <xs:enumeration value="GMT+08:00, Taipei (Hong Kong)"/>
            <xs:enumeration value="GMT+09:00, Korea (Seoul)"/>
            <xs:enumeration value="GMT+09:00, Tokyo (Tokyo)"/>
            <xs:enumeration value="GMT+09:30, Australia Central (Adelaide)"/>
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            <xs:enumeration value="GMT+09:30, Yakutsk (Yakutsk)"/>
            <xs:enumeration value="GMT+10:00, Australia Eastern (Brisbane)"/>
            <xs:enumeration value="GMT+10:00, Australia Eastern (Sydney)"/>
            <xs:enumeration value="GMT+10:00, Tasmania (Hobart)"/>
            <xs:enumeration value="GMT+10:00, Vladivostok (Vladivostok)"/>
            <xs:enumeration value="GMT+10:00, West Pacific (Guam)"/>
            <xs:enumeration value="GMT+11:00, Central Pacific (Solomon Is)"/>
            <xs:enumeration value="GMT+12:00, Fiji (Fiji)"/>
            <xs:enumeration value="GMT+12:00, New Zealand (Wellington)"/>
         </xs:restriction>
      </xs:simpleType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.TimeZoneLocationEnum -->
      <xs:simpleType name="TimeZoneLocationEnum">
         <xs:restriction base="xs:string">
            <xs:enumeration value="Africa/Abidjan"/>
            <xs:enumeration value="Africa/Accra"/>
            <xs:enumeration value="Africa/Addis_Ababa"/>
            <xs:enumeration value="Africa/Algiers"/>
            <xs:enumeration value="Africa/Asmara"/>
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<xs:enumeration value="Africa/Bangui"/>
<xs:enumeration value="Africa/Banjul"/>
<xs:enumeration value="Africa/Bissau"/>
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<xs:enumeration value="Africa/Brazzaville"/>
<xs:enumeration value="Africa/Bujumbura"/>
<xs:enumeration value="Africa/Cairo"/>
<xs:enumeration value="Africa/Casablanca"/>
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<xs:enumeration value="America/Anguilla"/>
<xs:enumeration value="America/Antigua"/>
<xs:enumeration value="America/Araguaina"/>
<xs:enumeration value="America/Argentina/Buenos_Aires"/>
<xs:enumeration value="America/Argentina/Catamarca"/>
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<xs:enumeration value="America/Mazatlan"/>
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```

```
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<xs:enumeration value="America/Tegucigalpa"/>
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<xs:enumeration value="Antarctica/Davis"/>
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<xs:enumeration value="Asia/Karachi"/>
<xs:enumeration value="Asia/Kashgar"/>
```

```
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<xs:enumeration value="Asia/Krasnoyarsk"/>
<xs:enumeration value="Asia/Kuala_Lumpur"/>
<xs:enumeration value="Asia/Kuching"/>
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<xs:enumeration value="Asia/Macau"/>
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<xs:enumeration value="Asia/Manila"/>
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<xs:enumeration value="Asia/Omsk"/>
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<xs:enumeration value="Asia/Qatar"/>
<xs:enumeration value="Asia/Qyzylorda"/>
<xs:enumeration value="Asia/Rangoon"/>
<xs:enumeration value="Asia/Riyadh"/>
<xs:enumeration value="Asia/Sakhalin"/>
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<xs:enumeration value="Asia/Seoul"/>
<xs:enumeration value="Asia/Shanghai"/>
<xs:enumeration value="Asia/Singapore"/>
<xs:enumeration value="Asia/Taipei"/>
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<xs:enumeration value="Asia/Urumqi"/>
<xs:enumeration value="Asia/Vientiane"/>
<xs:enumeration value="Asia/Vladivostok"/>
```

```
<xs:enumeration value="Asia/Yakutsk"/>
<xs:enumeration value="Asia/Yekaterinburg"/>
<xs:enumeration value="Asia/Yerevan"/>
<xs:enumeration value="Atlantic/Azores"/>
<xs:enumeration value="Atlantic/Bermuda"/>
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<xs:enumeration value="Atlantic/Reykjavik"/>
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<xs:enumeration value="Australia/Lord_Howe"/>
<xs:enumeration value="Australia/Melbourne"/>
<xs:enumeration value="Australia/Perth"/>
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<xs:enumeration value="EET"/>
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<xs:enumeration value="Europe/Berlin"/>
<xs:enumeration value="Europe/Brussels"/>
<xs:enumeration value="Europe/Bucharest"/>
<xs:enumeration value="Europe/Budapest"/>
```

```
<xs:enumeration value="Europe/Chisinau"/>
<xs:enumeration value="Europe/Copenhagen"/>
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<xs:enumeration value="Europe/Gibraltar"/>
<xs:enumeration value="Europe/Helsinki"/>
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<xs:enumeration value="Europe/Minsk"/>
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<xs:enumeration value="Europe/Rome"/>
<xs:enumeration value="Europe/Samara"/>
<xs:enumeration value="Europe/Simferopol"/>
<xs:enumeration value="Europe/Sofia"/>
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<xs:enumeration value="Europe/Tirane"/>
<xs:enumeration value="Europe/Uzhgorod"/>
<xs:enumeration value="Europe/Vaduz"/>
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<xs:enumeration value="Europe/Warsaw"/>
<xs:enumeration value="Europe/Zaporozhye"/>
<xs:enumeration value="Europe/Zurich"/>
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<xs:enumeration value="Indian/Antananarivo"/>
<xs:enumeration value="Indian/Chagos"/>
```

```
<xs:enumeration value="Indian/Christmas"/>
<xs:enumeration value="Indian/Cocos"/>
<xs:enumeration value="Indian/Comoro"/>
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<xs:enumeration value="Pacific/Auckland"/>
<xs:enumeration value="Pacific/Chatham"/>
<xs:enumeration value="Pacific/Easter"/>
<xs:enumeration value="Pacific/Efate"/>
<xs:enumeration value="Pacific/Enderbury"/>
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<xs:enumeration value="Pacific/Guadalcanal"/>
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<xs:enumeration value="Pacific/Johnston"/>
<xs:enumeration value="Pacific/Kiritimati"/>
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<xs:enumeration value="Pacific/Kwajalein"/>
<xs:enumeration value="Pacific/Majuro"/>
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<xs:enumeration value="Pacific/Midway"/>
<xs:enumeration value="Pacific/Nauru"/>
<xs:enumeration value="Pacific/Niue"/>
<xs:enumeration value="Pacific/Norfolk"/>
<xs:enumeration value="Pacific/Noumea"/>
<xs:enumeration value="Pacific/Pago_Pago"/>
```

```
            <xs:enumeration value="Pacific/Palau"/>
            <xs:enumeration value="Pacific/Pitcairn"/>
            <xs:enumeration value="Pacific/Ponape"/>
            <xs:enumeration value="Pacific/Port_Moresby"/>
            <xs:enumeration value="Pacific/Rarotonga"/>
            <xs:enumeration value="Pacific/Saipan"/>
            <xs:enumeration value="Pacific/Tahiti"/>
            <xs:enumeration value="Pacific/Tarawa"/>
            <xs:enumeration value="Pacific/Tongatapu"/>
            <xs:enumeration value="Pacific/Truk"/>
            <xs:enumeration value="Pacific/Wake"/>
            <xs:enumeration value="Pacific/Wallis"/>
            <xs:enumeration value="PST8PDT"/>
            <xs:enumeration value="WET"/>
         </xs:restriction>
      </xs:simpleType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateCustomerContext -->
      <xs:element name="UpdateCustomerContext" type="prov:UpdateCustomerContext"/>
      <xs:complexType name="UpdateCustomerContext">
         <xs:complexContent>
            <xs:extension base="prov:Context">
               <xs:sequence>
                 <xs:element name="UpdateCustomerResponse" type="prov:UpdateCustomerResponse"
minOccurs="0"/>
                  <xs:element name="UpdateCustomerRequest" type="prov:UpdateCustomerRequest"
minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateCustomerRequest -->
      <xs:element name="UpdateCustomerRequest" type="prov:UpdateCustomerRequest"/>
      <xs:complexType name="UpdateCustomerRequest">
         <xs:complexContent>
            <xs:extension base="prov:OperationRequest">
               <xs:sequence>
                  <xs:element name="Customer" type="prov:Customer" minOccurs="0"/>
               </xs:sequence>
```

```
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateCustomerResponse -->
      <xs:element name="UpdateCustomerResponse" type="prov:UpdateCustomerResponse"/>
      <xs:complexType name="UpdateCustomerResponse">
         <xs:complexContent>
            <xs:extension base="prov:OperationResponse">
               <xs:sequence/>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateDeviceContext -->
      <xs:element name="UpdateDeviceContext" type="prov:UpdateDeviceContext"/>
      <xs:complexType name="UpdateDeviceContext">
         <xs:complexContent>
            <xs:extension base="prov:Context">
               <xs:sequence>
                  <xs:element name="UpdateDeviceResponse" type="prov:UpdateDeviceResponse"
minOccurs="0"/>
                   <xs:element name="UpdateDeviceRequest" type="prov:UpdateDeviceRequest"
minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateDeviceRequest -->
      <xs:element name="UpdateDeviceRequest" type="prov:UpdateDeviceRequest"/>
      <xs:complexType name="UpdateDeviceRequest">
         <xs:complexContent>
            <xs:extension base="prov:OperationRequest">
               <xs:sequence>
               <xs:element name="PhysicalDevice" type="prov:PhysicalDevice" minOccurs="0"/>
               </xs:sequence>
            </xs:extension>
         </xs:complexContent>
      </xs:complexType>
      <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateDeviceResponse -->
```

```
   <xs:element name="UpdateDeviceResponse" type="prov:UpdateDeviceResponse"/>
   <xs:complexType name="UpdateDeviceResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateSiteContext -->
   <xs:element name="UpdateSiteContext" type="prov:UpdateSiteContext"/>
   <xs:complexType name="UpdateSiteContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="UpdateSiteResponse" type="prov:UpdateSiteResponse"
minOccurs="0"/>
               <xs:element name="UpdateSiteRequest" type="prov:UpdateSiteRequest"
minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateSiteRequest -->
   <xs:element name="UpdateSiteRequest" type="prov:UpdateSiteRequest"/>
   <xs:complexType name="UpdateSiteRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
            <xs:element name="GeographicSite" type="prov:GeographicSite" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateSiteResponse -->
   <xs:element name="UpdateSiteResponse" type="prov:UpdateSiteResponse"/>
   <xs:complexType name="UpdateSiteResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
```

```
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateSubscriberContext -->
   <xs:element name="UpdateSubscriberContext" type="prov:UpdateSubscriberContext"/>
   <xs:complexType name="UpdateSubscriberContext">
      <xs:complexContent>
         <xs:extension base="prov:Context">
            <xs:sequence>
               <xs:element name="UpdateSubscriberResponse"
type="prov:UpdateSubscriberResponse" minOccurs="0"/>
               <xs:element name="UpdateSubscriberRequest"
type="prov:UpdateSubscriberRequest" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateSubscriberRequest -->
   <xs:element name="UpdateSubscriberRequest" type="prov:UpdateSubscriberRequest"/>
   <xs:complexType name="UpdateSubscriberRequest">
      <xs:complexContent>
         <xs:extension base="prov:OperationRequest">
            <xs:sequence>
               <xs:element name="Subscriber" type="prov:Subscriber" minOccurs="0"/>
            </xs:sequence>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
   <!-- The type: com.cisco.nm.ms2.hcs.provision.UpdateSubscriberResponse -->
   <xs:element name="UpdateSubscriberResponse" type="prov:UpdateSubscriberResponse"/>
   <xs:complexType name="UpdateSubscriberResponse">
      <xs:complexContent>
         <xs:extension base="prov:OperationResponse">
            <xs:sequence/>
         </xs:extension>
      </xs:complexContent>
   </xs:complexType>
```

```
   <!-- The type: com.cisco.nm.ms2.hcs.provision.UrbanPropertyAddress -->
   <xs:element name="UrbanPropertyAddress" type="prov:UrbanPropertyAddress"/>
   <xs:complexType name="UrbanPropertyAddress">
      <xs:annotation>
         <xs:documentation>
An UrbanPropertyAddress is a structured textual way of describing how to find a Property
in an urban area (country properties are often defined differently). It is usually
composed of an ordered list of Location names based on context specific rulesThis is an
example of a concrete Geographic Location entity.
         </xs:documentation>
      </xs:annotation>
      <xs:complexContent>
         <xs:extension base="prov:GeographicAddress">
            <xs:sequence>
               <xs:element name="streetAddress" type="xs:string" minOccurs="0"
maxOccurs="unbounded">
                  <xs:annotation>
                     <xs:documentation>
the name of the street or other street type
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
               <xs:element name="locality" type="xs:string" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
&quot;An area of defined or undefined boundaries within a local authority or other
legislatively defined area, usually rural or semi rural in nature.&quot; [ANZLIC-STREET],
or a suburb &quot;a bounded locality within a city, town or shire principally of urban
character &quot; [ANZLIC-STREET]
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
               <xs:element name="postcode" type="xs:string" minOccurs="0">
                  <xs:annotation>
                     <xs:documentation>
A descriptor for a postal delivery area, used to speed and simplify the delivery of mail.
                     </xs:documentation>
                  </xs:annotation>
               </xs:element>
            </xs:sequence>
```

```
        </xs:extension>
      </xs:complexContent>
   </xs:complexType>
</xs:schema>
```

HCSProvisionCustomer.wsdl File

URL—http://*HCM_IP_address*:*HCM_Port_Number*/services/ProvisionCustomer?wsdl

The following is a sample XML code from the HCSProvisionCustomer.wsdl file.

```
<?xml version="1.0" encoding="UTF-8"?>
<definitions targetNamespace="http://www.cisco.hcs.com/HCSProvisionCustomer/WSDL"
xmlns:SOAP="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:prov="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:wsdltns="http://www.cisco.hcs.com/HCSProvisionCustomer/WSDL"
xmlns="http://schemas.xmlsoap.org/wsdl/">
  <types>
<xs:schema targetNamespace="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
attributeFormDefault="unqualified">
<xs:import namespace="http://www.cisco.hcs.com/HCSProvision.xsd"
schemaLocation="HCSProvision.xsd"/>
</xs:schema>
  </types>
  <message name="listCustomerRequest">
    <part name="request" element="prov:ListCustomerRequest"/>
  </message>
  <message name="deleteCustomerRequest">
    <part name="request" element="prov:DeleteCustomerRequest"/>
  </message>
  <message name="createCustomerResponse">
    <part name="createCustomerReturn" element="prov:CreateCustomerResponse"/>
  </message>
  <message name="deleteCustomerResponse">
    <part name="deleteCustomerReturn" element="prov:DeleteCustomerResponse"/>
  </message>
  <message name="updateCustomerRequest">
    <part name="request" element="prov:UpdateCustomerRequest"/>
  </message>
```

```
<message name="syncCustomerRequest">
  <part name="request" element="prov:SyncCustomerRequest"/>
</message>
<message name="createCustomerRequest">
  <part name="request" element="prov:CreateCustomerRequest"/>
</message>
<message name="syncCustomerResponse">
  <part name="syncCustomerReturn" element="prov:SyncCustomerResponse"/>
</message>
<message name="listCustomerResponse">
  <part name="listCustomerReturn" element="prov:ListCustomerResponse"/>
</message>
<message name="updateCustomerResponse">
  <part name="updateCustomerReturn" element="prov:UpdateCustomerResponse"/>
</message>
<portType name="ProvisionCustomerPortType">
  <operation name="createCustomer">
    <input message="wsdltns:createCustomerRequest"/>
    <output message="wsdltns:createCustomerResponse"/>
  </operation>
  <operation name="syncCustomer">
    <input message="wsdltns:syncCustomerRequest"/>
    <output message="wsdltns:syncCustomerResponse"/>
  </operation>
  <operation name="updateCustomer">
    <input message="wsdltns:updateCustomerRequest"/>
    <output message="wsdltns:updateCustomerResponse"/>
  </operation>
  <operation name="deleteCustomer">
    <input message="wsdltns:deleteCustomerRequest"/>
    <output message="wsdltns:deleteCustomerResponse"/>
  </operation>
  <operation name="listCustomer">
    <input message="wsdltns:listCustomerRequest"/>
    <output message="wsdltns:listCustomerResponse"/>
  </operation>
</portType>
<binding name="ProvisionCustomerBinding" type="wsdltns:ProvisionCustomerPortType">
```

```
<SOAP:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
<operation name="createCustomer">
  <SOAP:operation soapAction="http://www.ProvisionCustomer.com/createCustomer"/>
  <input>
    <SOAP:body use="literal"/>
  </input>
  <output>
    <SOAP:body use="literal"/>
  </output>
</operation>
<operation name="syncCustomer">
  <SOAP:operation soapAction="http://www.ProvisionCustomer.com/syncCustomer"/>
  <input>
    <SOAP:body use="literal"/>
  </input>
  <output>
    <SOAP:body use="literal"/>
  </output>
</operation>
<operation name="updateCustomer">
  <SOAP:operation soapAction="http://www.ProvisionCustomer.com/updateCustomer"/>
  <input>
    <SOAP:body use="literal"/>
  </input>
  <output>
    <SOAP:body use="literal"/>
  </output>
</operation>
<operation name="deleteCustomer">
  <SOAP:operation soapAction="http://www.ProvisionCustomer.com/deleteCustomer"/>
  <input>
    <SOAP:body use="literal"/>
  </input>
  <output>
    <SOAP:body use="literal"/>
  </output>
</operation>
<operation name="listCustomer">
```

```
      <SOAP:operation soapAction="http://www.ProvisionCustomer.com/listCustomer"/>
      <input>
        <SOAP:body use="literal"/>
      </input>
      <output>
        <SOAP:body use="literal"/>
      </output>
    </operation>
  </binding>
  <service name="ProvisionCustomerService">
    <port name="ProvisionCustomerPort" binding="wsdltns:ProvisionCustomerBinding">
      <SOAP:address location="$$$update this with the actual address before using$$$"/>
    </port>
  </service>
</definitions>
```

HCSProvisionSite.wsdl File

URL—http://*HCM_IP_address*:*HCM_Port_Number*/services/ProvisionSite?wsdl

The following is a sample XML code from the HCSProvisionSite.wsdl file.

```
<?xml version="1.0" encoding="UTF-8"?>
<definitions targetNamespace="http://www.cisco.hcs.com/HCSProvisionSite/WSDL"
xmlns:SOAP="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:prov="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:wsdltns="http://www.cisco.hcs.com/HCSProvisionSite/WSDL"
xmlns="http://schemas.xmlsoap.org/wsdl/">
  <types>
<xs:schema targetNamespace="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
attributeFormDefault="unqualified">
<xs:import namespace="http://www.cisco.hcs.com/HCSProvision.xsd"
schemaLocation="HCSProvision.xsd"/>
</xs:schema>
  </types>
  <message name="deleteSiteRequest">
    <part name="request" element="prov:DeleteSiteRequest"/>
  </message>
  <message name="updateSiteRequest">
```

```
  <part name="request" element="prov:UpdateSiteRequest"/>
</message>
<message name="createSiteResponse">
  <part name="createSiteReturn" element="prov:CreateSiteResponse"/>
</message>
<message name="listSiteResponse">
  <part name="listSiteReturn" element="prov:ListSiteResponse"/>
</message>
<message name="deleteSiteResponse">
  <part name="deleteSiteReturn" element="prov:DeleteSiteResponse"/>
</message>
<message name="updateSiteResponse">
  <part name="updateSiteReturn" element="prov:UpdateSiteResponse"/>
</message>
<message name="createSiteRequest">
  <part name="request" element="prov:CreateSiteRequest"/>
</message>
<message name="listSiteRequest">
  <part name="request" element="prov:ListSiteRequest"/>
</message>
<portType name="ProvisionSitePortType">
  <operation name="createSite">
    <input message="wsdltns:createSiteRequest"/>
    <output message="wsdltns:createSiteResponse"/>
  </operation>
  <operation name="updateSite">
    <input message="wsdltns:updateSiteRequest"/>
    <output message="wsdltns:updateSiteResponse"/>
  </operation>
  <operation name="deleteSite">
    <input message="wsdltns:deleteSiteRequest"/>
    <output message="wsdltns:deleteSiteResponse"/>
  </operation>
  <operation name="listSite">
    <input message="wsdltns:listSiteRequest"/>
    <output message="wsdltns:listSiteResponse"/>
  </operation>
</portType>
```

```
<binding name="ProvisionSiteBinding" type="wsdltns:ProvisionSitePortType">
  <SOAP:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
  <operation name="createSite">
    <SOAP:operation soapAction="http://www.ProvisionSite.com/createSite"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
  <operation name="updateSite">
    <SOAP:operation soapAction="http://www.ProvisionSite.com/updateSite"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
  <operation name="deleteSite">
    <SOAP:operation soapAction="http://www.ProvisionSite.com/deleteSite"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
  <operation name="listSite">
    <SOAP:operation soapAction="http://www.ProvisionSite.com/listSite"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
```

```
  </binding>
  <service name="ProvisionSiteService">
    <port name="ProvisionSitePort" binding="wsdltns:ProvisionSiteBinding">
      <SOAP:address location="$$$update this with the actual address before using$$$"/>
    </port>
  </service>
</definitions>
```

HCSProvisionSubscriber.wsdl File

URL—http://*HCM_IP_address*:*HCM_Port_Number*/services/ProvisionSubscriber?wsdl

The following is a sample XML code from the HCSProvisionSubscriber.wsdl file.

```
<?xml version="1.0" encoding="UTF-8"?>
<definitions targetNamespace="http://www.cisco.hcs.com/HCSProvisionSubscriber/WSDL"
xmlns:SOAP="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:wsdltns="http://www.cisco.hcs.com/HCSProvisionSubscriber/WSDL"
xmlns:prov="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns="http://schemas.xmlsoap.org/wsdl/">
  <types>
<xs:schema targetNamespace="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
attributeFormDefault="unqualified">
<xs:import namespace="http://www.cisco.hcs.com/HCSProvision.xsd"
schemaLocation="HCSProvision.xsd"/>
</xs:schema>
  </types>
  <message name="submitSubscriberOrderResponse">
    <part name="submitSubscriberOrderReturn"
element="prov:SubmitSubscriberOrderResponse"/>
  </message>
  <message name="listOrderResponse">
    <part name="listOrderReturn" element="prov:ListOrderResponse"/>
  </message>
  <message name="createSubscriberResponse">
    <part name="createSubscriberReturn" element="prov:CreateSubscriberResponse"/>
  </message>
  <message name="listSubscriberProductResponse">
    <part name="listSubscriberProductReturn"
element="prov:ListSubscriberProductResponse"/>
```

```
</message>
<message name="listSubscriberResponse">
  <part name="listSubscriberReturn" element="prov:ListSubscriberResponse"/>
</message>
<message name="listOrderRequest">
  <part name="request" element="prov:ListOrderRequest"/>
</message>
<message name="submitSubscriberOrderRequest">
  <part name="request" element="prov:SubmitSubscriberOrderRequest"/>
</message>
<message name="updateSubscriberRequest">
  <part name="request" element="prov:UpdateSubscriberRequest"/>
</message>
<message name="listSubscriberRequest">
  <part name="request" element="prov:ListSubscriberRequest"/>
</message>
<message name="listSubscriberProductRequest">
  <part name="request" element="prov:ListSubscriberProductRequest"/>
</message>
<message name="updateSubscriberResponse">
  <part name="updateSubscriberReturn" element="prov:UpdateSubscriberResponse"/>
</message>
<message name="deleteSubscriberRequest">
  <part name="request" element="prov:DeleteSubscriberRequest"/>
</message>
<message name="deleteSubscriberResponse">
  <part name="deleteSubscriberReturn" element="prov:DeleteSubscriberResponse"/>
</message>
<message name="createSubscriberRequest">
  <part name="request" element="prov:CreateSubscriberRequest"/>
</message>
<portType name="ProvisionSubscriberPortType">
  <operation name="createSubscriber">
    <input message="wsdltns:createSubscriberRequest"/>
    <output message="wsdltns:createSubscriberResponse"/>
  </operation>
  <operation name="submitSubscriberOrder">
    <input message="wsdltns:submitSubscriberOrderRequest"/>
```

```
      <output message="wsdltns:submitSubscriberOrderResponse"/>
    </operation>
    <operation name="updateSubscriber">
      <input message="wsdltns:updateSubscriberRequest"/>
      <output message="wsdltns:updateSubscriberResponse"/>
    </operation>
    <operation name="deleteSubscriber">
      <input message="wsdltns:deleteSubscriberRequest"/>
      <output message="wsdltns:deleteSubscriberResponse"/>
    </operation>
    <operation name="listSubscriber">
      <input message="wsdltns:listSubscriberRequest"/>
      <output message="wsdltns:listSubscriberResponse"/>
    </operation>
    <operation name="listOrder">
      <input message="wsdltns:listOrderRequest"/>
      <output message="wsdltns:listOrderResponse"/>
    </operation>
    <operation name="listSubscriberProduct">
      <input message="wsdltns:listSubscriberProductRequest"/>
      <output message="wsdltns:listSubscriberProductResponse"/>
    </operation>
  </portType>
  <binding name="ProvisionSubscriberBinding" type="wsdltns:ProvisionSubscriberPortType">
    <SOAP:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="createSubscriber">
     <SOAP:operation soapAction="http://www.ProvisionSubscriber.com/createSubscriber"/>
      <input>
        <SOAP:body use="literal"/>
      </input>
      <output>
        <SOAP:body use="literal"/>
      </output>
    </operation>
    <operation name="submitSubscriberOrder">
      <SOAP:operation
soapAction="http://www.ProvisionSubscriber.com/submitSubscriberOrder"/>
      <input>
```

```
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
  <operation name="updateSubscriber">
   <SOAP:operation soapAction="http://www.ProvisionSubscriber.com/updateSubscriber"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
  <operation name="deleteSubscriber">
   <SOAP:operation soapAction="http://www.ProvisionSubscriber.com/deleteSubscriber"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
  <operation name="listSubscriber">
    <SOAP:operation soapAction="http://www.ProvisionSubscriber.com/listSubscriber"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
    <output>
      <SOAP:body use="literal"/>
    </output>
  </operation>
  <operation name="listOrder">
    <SOAP:operation soapAction="http://www.ProvisionSubscriber.com/listOrder"/>
    <input>
      <SOAP:body use="literal"/>
    </input>
```

```
      <output>
        <SOAP:body use="literal"/>
      </output>
    </operation>
    <operation name="listSubscriberProduct">
      <SOAP:operation
soapAction="http://www.ProvisionSubscriber.com/listSubscriberProduct"/>
      <input>
        <SOAP:body use="literal"/>
      </input>
      <output>
        <SOAP:body use="literal"/>
      </output>
    </operation>
  </binding>
  <service name="ProvisionSubscriberService">
    <port name="ProvisionSubscriberPort" binding="wsdltns:ProvisionSubscriberBinding">
      <SOAP:address location="$$$update this with the actual address before using$$$"/>
    </port>
  </service>
</definitions>
```

APPENDIX B

Sample XML API Requests and Responses

This appendix contains sample XML API requests and responses. It includes the following sections:

Sample ProvisionCustomer Data Service XML API Requests and Responses

For listCustomer, you have the option of retrieving the data of all customers or retrieve the data of only one customer.

Retrieving Data of All Customers

This section includes the following sample ProvisionCustomer data service XML API requests and responses to retrieve the data of all customers:

Sample listCustomer XML Request

```
<hcs:ListCustomerRequest xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd">

<!-- ***************** -->
<!-- List Customer:    -->
<!--   CustomerID      -->
<!-- ***************** -->

  <RequestHeader>
    <targetDomain>UnifiedCommunications</targetDomain>
  </RequestHeader>

  <Customer>
```

```
      <partyRoleId></partyRoleId>
   </Customer>

</hcs:ListCustomerRequest>
```

Sample listCustomer XML Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd">
   <SOAP-ENV:Header/>
   <SOAP-ENV:Body>
      <hcs:ListCustomerResponse>
         <isSuccessful>true</isSuccessful>
         <moreResults>false</moreResults>
         <endsWithResultNumber>2</endsWithResultNumber>
         <Customers>
            <RootEntityDescribedBy>
               <value>0</value>
               <CharacteristicSpecification>
                  <name>InterSitePrefix</name>
               </CharacteristicSpecification>
            </RootEntityDescribedBy>
            <partyRoleId>Customer001</partyRoleId>
            <PartyRoleContactableVia xsi:type="hcs:PostalContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
               <AbstractGeographicAddress xsi:type="hcs:UrbanPropertyAddress">
                  <country>USA</country>
               </AbstractGeographicAddress>
            </PartyRoleContactableVia>
         </Customers>
         <Customers>
            <RootEntityDescribedBy>
               <value>8</value>
               <CharacteristicSpecification>
                  <name>InterSitePrefix</name>
               </CharacteristicSpecification>
            </RootEntityDescribedBy>
            <RootEntityDescribedBy>
               <value>HWG_2</value>
               <CharacteristicSpecification>
                  <name>HardwareGroupName</name>
               </CharacteristicSpecification>
            </RootEntityDescribedBy>
            <partyRoleId>Customer002</partyRoleId>
            <PartyRoleContactableVia xsi:type="hcs:PostalContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

```
                <AbstractGeographicAddress xsi:type="hcs:UrbanPropertyAddress">
                   <country>USA</country>
                   <stateOrProvince>CA</stateOrProvince>
                   <streetAddress>123 Main Street</streetAddress>
  <streetAddress>Suite 100</streetAddress>
  <streetAddress>Attn: John</streetAddress>
                   <locality>Bedford</locality>
                   <postcode>998877</postcode>
                </AbstractGeographicAddress>
             </PartyRoleContactableVia>
             <PartyRoleContactableVia xsi:type="hcs:EmailContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                <eMailAddress>johndoe@customer002.com</eMailAddress>
             </PartyRoleContactableVia>
             <PartyRoleContactableVia xsi:type="hcs:TelephoneNumber"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                <number>408 424 1234</number>
                <type>Primary</type>
             </PartyRoleContactableVia>
             <PartyRoleAssociation>
                <associationType>MainContact</associationType>
                <PartyRole xsi:type="hcs:Contact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                   <Party xsi:type="hcs:Individual">
                      <IndividualINamedUsing>
                         <givenNames>John</givenNames>
                         <familyNames>Doe</familyNames>
                      </IndividualINamedUsing>
                   </Party>
                </PartyRole>
             </PartyRoleAssociation>
          </Customers>

       </hcs:ListCustomerResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Retrieving Data of One Customer

This section includes the following sample ProvisionCustomer data service XML API requests and responses to retrieve the data of only one customer:

- Sample listCustomer XML Request, page B-4
- Sample listCustomer XML Response, page B-4

Sample listCustomer XML Request

The following is a sample XML code of the listCustomer XML request.

```
<hcs:ListCustomerRequest xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd">

<!-- ***************** -->
<!-- List Customer:    -->
<!--   CustomerID      -->
<!-- ***************** -->

  <RequestHeader>
    <targetDomain>UnifiedCommunications</targetDomain>
  </RequestHeader>

  <Customer>
     <partyRoleId>Customer002</partyRoleId>
    <RootEntityDescribedBy>
      <value>Customer002</value>

      <CharacteristicSpecification>
        <name>partyRoleId</name>
      </CharacteristicSpecification>
    </RootEntityDescribedBy>
  </Customer>

</hcs:ListCustomerRequest>
```

Sample listCustomer XML Response

The following is a sample XML code of the listCustomer XML response.

```
<?xml version="1.0" encoding="UTF-8"?>
<prov:ListCustomerResponse xmlns:prov="http://www.cisco.hcs.com/HCSProvision.xsd">
  <isSuccessful>true</isSuccessful>
  <moreResults>false</moreResults>
  <endsWithResultNumber>1</endsWithResultNumber>
 <Customers>
<RootEntityDescribedBy>
   <value>8</value>
   <CharacteristicSpecification>
  <name>InterSitePrefix</name>
   </CharacteristicSpecification>
</RootEntityDescribedBy>
<RootEntityDescribedBy>
```

```
   <value>HWG_2</value>
   <CharacteristicSpecification>
  <name>HardwareGroupName</name>
   </CharacteristicSpecification>
</RootEntityDescribedBy>
<partyRoleId>Customer002</partyRoleId>
<PartyRoleContactableVia xsi:type="hcs:PostalContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
   <AbstractGeographicAddress xsi:type="hcs:UrbanPropertyAddress">
  <country>USA</country>
  <stateOrProvince>CA</stateOrProvince>
  <streetAddress>123 Main Street</streetAddress>
  <streetAddress>Suite 100</streetAddress>
  <streetAddress>Attn: John</streetAddress>
  <locality>Bedford</locality>
  <postcode>998877</postcode>
   </AbstractGeographicAddress>
</PartyRoleContactableVia>
<PartyRoleContactableVia xsi:type="hcs:EmailContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
   <eMailAddress>johndoe@customer002.com</eMailAddress>
</PartyRoleContactableVia>
<PartyRoleContactableVia xsi:type="hcs:TelephoneNumber"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
   <number>408 424 1234</number>
   <type>Primary</type>
</PartyRoleContactableVia>
<PartyRoleAssociation>
   <associationType>MainContact</associationType>
   <PartyRole xsi:type="hcs:Contact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Party xsi:type="hcs:Individual">
 <IndividualINamedUsing>
<givenNames>John</givenNames>
<familyNames>Doe</familyNames>
 </IndividualINamedUsing>
  </Party>
   </PartyRole>
</PartyRoleAssociation>
 </Customers>
</prov:ListCustomerResponse>
```

Sample ProvisionSite Data Service XML API Requests and Responses

This section includes the following sample ProvisionSite data service XML API requests and responses:

Sample listSite XML Request

```
<?xml version="1.0" encoding="UTF-8"?>
<hcs:ListSiteRequest xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <RequestHeader>
     <targetDomain>UnifiedCommunications</targetDomain>
  </RequestHeader>
   <GeographicSite>
<!-- Customer -->
     <PlacePartyRoleAssoc>
      <placeRole>Customer</placeRole>
      <PartyRole xsi:type="hcs:Customer">
        <partyRoleId>Customer002</partyRoleId>
      </PartyRole>
    </PlacePartyRoleAssoc>
  </GeographicSite>
</hcs:ListSiteRequest>
```

Sample listSite XML Response

The following is a sample XML code for the listSite XML response.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd">
   <SOAP-ENV:Header/>
   <SOAP-ENV:Body>
      <hcs:ListSiteResponse>
         <isSuccessful>true</isSuccessful>
         <moreResults>false</moreResults>
         <endsWithResultNumber>2</endsWithResultNumber>
         <GeographicSite>
            <RootEntityDescribedBy>
               <value>false</value>
               <CharacteristicSpecification>
                  <name>ErSupport</name>
               </CharacteristicSpecification>
```

```
            </RootEntityDescribedBy>
            <ID>SanJose_Site</ID>
            <PlaceResourceAssoc>
               <placeRole>Subnet</placeRole>
               <Resource xsi:type="hcs:IPAddress"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                  <networkNumber>192.168.11.0</networkNumber>
                  <subnetMask>24</subnetMask>
               </Resource>
            </PlaceResourceAssoc>
            <PlaceResourceAssoc>
               <placeRole>DialPlan</placeRole>
               <Resource xsi:type="hcs:LogicalResource"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                  <RootEntityDescribedBy>
                     <value>212</value>
                     <CharacteristicSpecification>
                        <name>E164AreaCode</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>3</value>
                     <CharacteristicSpecification>
                        <name>ExtensionDigits</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>0</value>
                     <CharacteristicSpecification>
                        <name>ExternalAccessPrefix</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>CUCM-8</value>
                     <CharacteristicSpecification>
                        <name>PbxTemplate</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>00043</value>
                     <CharacteristicSpecification>
                        <name>SiteCode</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
               </Resource>
            </PlaceResourceAssoc>
```

```
            <PlaceResourceAssoc>
               <placeRole>HardwareGroup</placeRole>
               <Resource xsi:type="hcs:LogicalDevice"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                  <commonName>2_HWG</commonName>
               </Resource>
            </PlaceResourceAssoc>
            <PlaceResourceAssoc>
               <placeRole>MediaService</placeRole>
               <Resource xsi:type="hcs:LogicalResource"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                  <commonName>None</commonName>
               </Resource>
            </PlaceResourceAssoc>
            <AuthorizedProductSpecification>
               <productId>Line</productId>
               <ProductSpecCharUse>
                  <ProductSpecCharacteristic>
                     <ID>lineType</ID>
                     <ProdSpecCharacteristicEnumeratedBy>
                        <value>Direct dial inward extensions</value>
                        <maxCardinality>5</maxCardinality>
                     </ProdSpecCharacteristicEnumeratedBy>
                     <ProdSpecCharacteristicEnumeratedBy>
                        <value>Emergency call back lines</value>
                        <maxCardinality>25</maxCardinality>
                     </ProdSpecCharacteristicEnumeratedBy>
                     <ProdSpecCharacteristicEnumeratedBy>
                        <value>Internal extensions</value>
                        <maxCardinality>25</maxCardinality>
                     </ProdSpecCharacteristicEnumeratedBy>
                     <ProdSpecCharacteristicEnumeratedBy>
                        <value>Analogue PSTN lines</value>
                        <maxCardinality>25</maxCardinality>
                     </ProdSpecCharacteristicEnumeratedBy>
                     <ProdSpecCharacteristicEnumeratedBy>
                        <value>Incoming lines</value>
                        <maxCardinality>3500</maxCardinality>
                     </ProdSpecCharacteristicEnumeratedBy>
                     <ProdSpecCharacteristicEnumeratedBy>
                        <value>Outgoing lines</value>
                        <maxCardinality>2500</maxCardinality>
                     </ProdSpecCharacteristicEnumeratedBy>
                  </ProductSpecCharacteristic>
               </ProductSpecCharUse>
            </AuthorizedProductSpecification>
```

```
<AuthorizedProductSpecification>
   <productId>Phone</productId>
   <ProductSpecCharUse>
      <ProductSpecCharacteristic>
         <ID>phoneType</ID>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7905 SCCP</value>
            <maxCardinality>1</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7940 SCCP</value>
            <maxCardinality>3</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7941 SCCP</value>
            <maxCardinality>25</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7960 SCCP</value>
            <maxCardinality>25</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7960 SIP</value>
            <maxCardinality>10</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7961 SIP</value>
            <maxCardinality>25</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7962 SCCP</value>
            <maxCardinality>25</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 7970 SCCP</value>
            <maxCardinality>2</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 3911 SIP</value>
            <maxCardinality>42</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Cisco 3951 SIP</value>
            <maxCardinality>22</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
      </ProductSpecCharacteristic>
```

```
            </ProductSpecCharUse>
         </AuthorizedProductSpecification>
         <AuthorizedProductSpecification>
            <productId>Location</productId>
            <ProductSpecCharUse>
               <ProductSpecCharacteristic>
                  <ID>serviceType</ID>
                  <ProdSpecCharacteristicEnumeratedBy>
                     <value>Conferencing</value>
                     <maxCardinality>125</maxCardinality>
                  </ProdSpecCharacteristicEnumeratedBy>
                  <ProdSpecCharacteristicEnumeratedBy>
                     <value>Corporate phone book</value>
                     <maxCardinality>25</maxCardinality>
                  </ProdSpecCharacteristicEnumeratedBy>
                  <ProdSpecCharacteristicEnumeratedBy>
                     <value>Music on hold</value>
                     <maxCardinality>25</maxCardinality>
                  </ProdSpecCharacteristicEnumeratedBy>
                  <ProdSpecCharacteristicEnumeratedBy>
                     <value>Personal phone book</value>
                     <maxCardinality>25</maxCardinality>
                  </ProdSpecCharacteristicEnumeratedBy>
                  <ProdSpecCharacteristicEnumeratedBy>
                     <value>Operator console</value>
                     <maxCardinality>25</maxCardinality>
                  </ProdSpecCharacteristicEnumeratedBy>
                  <ProdSpecCharacteristicEnumeratedBy>
                     <value>User mobility</value>
                     <maxCardinality>25</maxCardinality>
                  </ProdSpecCharacteristicEnumeratedBy>
                  <ProdSpecCharacteristicEnumeratedBy>
                     <value>Voicemail</value>
                     <maxCardinality>25</maxCardinality>
                  </ProdSpecCharacteristicEnumeratedBy>
               </ProductSpecCharacteristic>
            </ProductSpecCharUse>
         </AuthorizedProductSpecification>
      </GeographicSite>
      <GeographicSite>
         <RootEntityDescribedBy>
            <value>false</value>
            <CharacteristicSpecification>
               <name>ErSupport</name>
            </CharacteristicSpecification>
         </RootEntityDescribedBy>
```

```
            <ID>FinalLoc</ID>
            <PlaceResourceAssoc>
               <placeRole>Subnet</placeRole>
               <Resource xsi:type="hcs:IPAddress"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                  <networkNumber>192.168.11.0</networkNumber>
                  <subnetMask>24</subnetMask>
               </Resource>
            </PlaceResourceAssoc>
            <PlaceResourceAssoc>
               <placeRole>DialPlan</placeRole>
               <Resource xsi:type="hcs:LogicalResource"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                  <RootEntityDescribedBy>
                     <value>212</value>
                     <CharacteristicSpecification>
                        <name>E164AreaCode</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>3</value>
                     <CharacteristicSpecification>
                        <name>ExtensionDigits</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>0</value>
                     <CharacteristicSpecification>
                        <name>ExternalAccessPrefix</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>CUCM-8</value>
                     <CharacteristicSpecification>
                        <name>PbxTemplate</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
                  <RootEntityDescribedBy>
                     <value>00036</value>
                     <CharacteristicSpecification>
                        <name>SiteCode</name>
                     </CharacteristicSpecification>
                  </RootEntityDescribedBy>
               </Resource>
            </PlaceResourceAssoc>
            <PlaceResourceAssoc>
```

```
                <placeRole>HardwareGroup</placeRole>
                <Resource xsi:type="hcs:LogicalDevice"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                   <commonName>Praga_HWG</commonName>
                </Resource>
             </PlaceResourceAssoc>
             <PlaceResourceAssoc>
                <placeRole>MediaService</placeRole>
                <Resource xsi:type="hcs:LogicalResource"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                   <commonName>None</commonName>
                </Resource>
             </PlaceResourceAssoc>
             <AuthorizedProductSpecification>
                <productId>Line</productId>
                <ProductSpecCharUse>
                   <ProductSpecCharacteristic>
                      <ID>lineType</ID>
                      <ProdSpecCharacteristicEnumeratedBy>
                         <value>Internal extensions</value>
                         <maxCardinality>10</maxCardinality>
                      </ProdSpecCharacteristicEnumeratedBy>
                      <ProdSpecCharacteristicEnumeratedBy>
                         <value>Direct dial inward extensions</value>
                         <maxCardinality>245</maxCardinality>
                      </ProdSpecCharacteristicEnumeratedBy>
                      <ProdSpecCharacteristicEnumeratedBy>
                         <value>Emergency call back lines</value>
                         <maxCardinality>518</maxCardinality>
                      </ProdSpecCharacteristicEnumeratedBy>
                      <ProdSpecCharacteristicEnumeratedBy>
                         <value>Incoming lines</value>
                         <maxCardinality>3500</maxCardinality>
                      </ProdSpecCharacteristicEnumeratedBy>
                      <ProdSpecCharacteristicEnumeratedBy>
                         <value>Outgoing lines</value>
                         <maxCardinality>2500</maxCardinality>
                      </ProdSpecCharacteristicEnumeratedBy>
                      <ProdSpecCharacteristicEnumeratedBy>
                         <value>Analogue PSTN lines</value>
                         <maxCardinality>2000</maxCardinality>
                      </ProdSpecCharacteristicEnumeratedBy>
                   </ProductSpecCharacteristic>
                </ProductSpecCharUse>
             </AuthorizedProductSpecification>
             <AuthorizedProductSpecification>
```

```
<productId>Phone</productId>
<ProductSpecCharUse>
   <ProductSpecCharacteristic>
      <ID>phoneType</ID>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7960 SCCP</value>
         <maxCardinality>10</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 3911 SIP</value>
         <maxCardinality>42</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 3951 SIP</value>
         <maxCardinality>22</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7905 SCCP</value>
         <maxCardinality>99</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7940 SCCP</value>
         <maxCardinality>1200</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7941 SCCP</value>
         <maxCardinality>500</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7960 SIP</value>
         <maxCardinality>232</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7961 SIP</value>
         <maxCardinality>1000</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7962 SCCP</value>
         <maxCardinality>1000</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
      <ProdSpecCharacteristicEnumeratedBy>
         <value>Cisco 7970 SCCP</value>
         <maxCardinality>1020</maxCardinality>
      </ProdSpecCharacteristicEnumeratedBy>
   </ProductSpecCharacteristic>
</ProductSpecCharUse>
```

```
</AuthorizedProductSpecification>
<AuthorizedProductSpecification>
   <productId>Location</productId>
   <ProductSpecCharUse>
      <ProductSpecCharacteristic>
         <ID>serviceType</ID>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Voicemail</value>
            <maxCardinality>10</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Conferencing</value>
            <maxCardinality>1015</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Corporate phone book</value>
            <maxCardinality>1016</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Music on hold</value>
            <maxCardinality>1000</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Personal phone book</value>
            <maxCardinality>1000</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Operator console</value>
            <maxCardinality>1000</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>User mobility</value>
            <maxCardinality>1400</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Conferencing</value>
            <maxCardinality>10</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>Corporate phone book</value>
            <maxCardinality>10</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
         <ProdSpecCharacteristicEnumeratedBy>
            <value>User mobility</value>
            <maxCardinality>10</maxCardinality>
         </ProdSpecCharacteristicEnumeratedBy>
```

```
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Conferencing</value>
                           <maxCardinality>200</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Corporate phone book</value>
                           <maxCardinality>200</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Conferencing</value>
                           <maxCardinality>47</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Corporate phone book</value>
                           <maxCardinality>56</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Conferencing</value>
                           <maxCardinality>1</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Conferencing</value>
                           <maxCardinality>1</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Conferencing</value>
                           <maxCardinality>1</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>Corporate phone book</value>
                           <maxCardinality>1</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                        <ProdSpecCharacteristicEnumeratedBy>
                           <value>User mobility</value>
                           <maxCardinality>1</maxCardinality>
                        </ProdSpecCharacteristicEnumeratedBy>
                     </ProductSpecCharacteristic>
                  </ProductSpecCharUse>
               </AuthorizedProductSpecification>
            </GeographicSite>

         </hcs:ListSiteResponse>
      </SOAP-ENV:Body>
   </SOAP-ENV:Envelope>
```

Sample ProvisionSubscriber Data Service XML API Requests and Responses

This section includes the following sample ProvisionSubscriber data service XML API requests and responses:

Sample listSubscriber XML Request

The following is a sample XML code for the listSubscriber XML request.

```
<?xml version="1.0" encoding="UTF-8"?>
<hcs:ListSubscriberRequest xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

<!-- ********************* -->
<!-- List Subscriber:      -->
<!--   subscriberID        -->
<!-- ********************* -->

  <RequestHeader>
    <targetDomain>UnifiedCommunications</targetDomain>
  </RequestHeader>

  <Subscriber>

<!-- Customer -->
    <PartyRoleAssociation>
      <associationType>Customer</associationType>
      <PartyRole xsi:type="hcs:Customer">
        <partyRoleId>Customer002</partyRoleId>
      </PartyRole>
    </PartyRoleAssociation>

  </Subscriber>

</hcs:ListSubscriberRequest>
```

Sample listSubscriber XML Response

The following is a sample XML code for the listSubscriber XML response.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd">
   <SOAP-ENV:Header/>
   <SOAP-ENV:Body>
      <hcs:ListSubscriberResponse>
         <isSuccessful>true</isSuccessful>
         <moreResults>false</moreResults>
         <endsWithResultNumber>3</endsWithResultNumber>
         <Subscriber>
            <RootEntityDescribedBy>
               <value>FeatGrp01</value>
               <CharacteristicSpecification>
                  <name>FeatureGroupName</name>
               </CharacteristicSpecification>
            </RootEntityDescribedBy>
            <partyRoleId>subscriber001</partyRoleId>
            <PartyRoleContactableVia xsi:type="hcs:PostalContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
               <AbstractGeographicAddress xsi:type="hcs:UrbanPropertyAddress">
                  <country>USA</country>
               </AbstractGeographicAddress>
            </PartyRoleContactableVia>
            <Party xsi:type="hcs:Individual"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
               <IndividualINamedUsing>
                  <familyNames>subscriber1</familyNames>
               </IndividualINamedUsing>
            </Party>
         </Subscriber>
         <Subscriber>
            <RootEntityDescribedBy>
               <value>FeatGrp02</value>
               <CharacteristicSpecification>
                  <name>FeatureGroupName</name>
               </CharacteristicSpecification>
            </RootEntityDescribedBy>
            <partyRoleId>subscriber002</partyRoleId>
            <PartyRoleContactableVia xsi:type="hcs:PostalContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
               <AbstractGeographicAddress xsi:type="hcs:UrbanPropertyAddress">
                  <country>USA</country>
               </AbstractGeographicAddress>
            </PartyRoleContactableVia>
```

```
            <Party xsi:type="hcs:Individual"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
               <IndividualINamedUsing>
                  <familyNames>subscriber2</familyNames>
               </IndividualINamedUsing>
            </Party>
         </Subscriber>
         <Subscriber>
            <RootEntityDescribedBy>
               <value>FeatGrp03</value>
               <CharacteristicSpecification>
                  <name>FeatureGroupName</name>
               </CharacteristicSpecification>
            </RootEntityDescribedBy>
            <partyRoleId>subscriber003</partyRoleId>
            <PartyRoleContactableVia xsi:type="hcs:PostalContact"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
               <AbstractGeographicAddress xsi:type="hcs:UrbanPropertyAddress">
                  <country>USA</country>
               </AbstractGeographicAddress>
            </PartyRoleContactableVia>
            <Party xsi:type="hcs:Individual"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
               <IndividualINamedUsing>
                  <familyNames>subscriber3</familyNames>
               </IndividualINamedUsing>
            </Party>
         </Subscriber>


      </hcs:ListSubscriberResponse>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Sample listSubscriberProduct XML Request

The following is a sample XML code for the listSubscriberProduct XML request.

```
<hcs:ListSubscriberProductRequest xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">


  <RequestHeader>
    <targetDomain>UnifiedCommunications</targetDomain>
  </RequestHeader>


  <Product>


<!-- Customer -->
```

```
    <ProductOfInterestTo xsi:type="hcs:PartyRoleProductInvolvement">
      <productInvolvementRole>Customer</productInvolvementRole>
      <PartyRole xsi:type="hcs:Customer">
        <partyRoleId>Customer002</partyRoleId>
      </PartyRole>
    </ProductOfInterestTo>

<!-- Selection Criteria -->
    <RootEntityDescribedBy>

      <value>subscriber001</value>
       <CharacteristicSpecification>
        <name>subscriberPartyRoleId</name>
      </CharacteristicSpecification>
    </RootEntityDescribedBy>

  </Product>

</hcs:ListSubscriberProductRequest>
```

Sample listSubscriberProduct XML Response

The following is a sample XML code for the listSubscriberProduct XML response.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:hcs="http://www.cisco.hcs.com/HCSProvision.xsd">
   <SOAP-ENV:Header/>
   <SOAP-ENV:Body>
      <hcs:ListSubscriberProductResponse>
         <isSuccessful>true</isSuccessful>
         <moreResults>false</moreResults>
         <Product>
            <ProductCharacteristicValue>
               <ProductCharacteristicValueRelationship>
                  <ProductCharacteristicValue>
                     <ProdSpecCharDescribesProdCharacteristicValue>
                        <ID>line_features</ID>
                     </ProdSpecCharDescribesProdCharacteristicValue>
                  </ProductCharacteristicValue>
               </ProductCharacteristicValueRelationship>
               <ProductCharacteristicValueRelationship>
                  <ProductCharacteristicValue>
                     <value>000302020</value>
                     <ProdSpecCharDescribesProdCharacteristicValue>
                        <ID>lines_fintNumber</ID>
```

```
            </ProdSpecCharDescribesProdCharacteristicValue>
         </ProductCharacteristicValue>
      </ProductCharacteristicValueRelationship>
      <ProductCharacteristicValueRelationship>
         <ProductCharacteristicValue>
            <value>1</value>
            <ProdSpecCharDescribesProdCharacteristicValue>
               <ID>lines_lineOrder</ID>
            </ProdSpecCharDescribesProdCharacteristicValue>
         </ProductCharacteristicValue>
      </ProductCharacteristicValueRelationship>
      <ProdSpecCharDescribesProdCharacteristicValue>
         <ID>lines</ID>
      </ProdSpecCharDescribesProdCharacteristicValue>
   </ProductCharacteristicValue>
   <ProductCharacteristicValue>
      <ProductCharacteristicValueRelationship>
         <ProductCharacteristicValue>
            <value>SEP5324698250AB</value>
            <ProdSpecCharDescribesProdCharacteristicValue>
               <ID>deviceIdentifier</ID>
            </ProdSpecCharDescribesProdCharacteristicValue>
         </ProductCharacteristicValue>
      </ProductCharacteristicValueRelationship>
      <ProductCharacteristicValueRelationship>
         <ProductCharacteristicValue>
            <value>Device Name</value>
            <ProdSpecCharDescribesProdCharacteristicValue>
               <ID>deviceIdentifierType</ID>
            </ProdSpecCharDescribesProdCharacteristicValue>
         </ProductCharacteristicValue>
      </ProductCharacteristicValueRelationship>
      <ProdSpecCharDescribesProdCharacteristicValue>
         <ID>deviceIdentifierData</ID>
      </ProdSpecCharDescribesProdCharacteristicValue>
   </ProductCharacteristicValue>
   <ProductCharacteristicValue>
      <value>Standard 7941 SCCP</value>
      <ProdSpecCharDescribesProdCharacteristicValue>
         <ID>buttonTemplateName</ID>
      </ProdSpecCharDescribesProdCharacteristicValue>
   </ProductCharacteristicValue>
   <ProductCharacteristicValue>
      <value>FeatGrp01</value>
      <ProdSpecCharDescribesProdCharacteristicValue>
         <ID>featureGroupName</ID>
```

```
                    </ProdSpecCharDescribesProdCharacteristicValue>
                 </ProductCharacteristicValue>
                 <ProductCharacteristicValue>
                    <value>auto</value>
                    <ProdSpecCharDescribesProdCharacteristicValue>
                       <ID>idleTimeout</ID>
                    </ProdSpecCharDescribesProdCharacteristicValue>
                 </ProductCharacteristicValue>
                 <ProductCharacteristicValue>
                    <value>None</value>
                    <ProdSpecCharDescribesProdCharacteristicValue>
                       <ID>idleUrl</ID>
                    </ProdSpecCharDescribesProdCharacteristicValue>
                 </ProductCharacteristicValue>
                 <ProductCharacteristicValue>
                    <value>auto</value>
                    <ProdSpecCharDescribesProdCharacteristicValue>
                       <ID>phoneLocale</ID>
                    </ProdSpecCharDescribesProdCharacteristicValue>
                 </ProductCharacteristicValue>
                 <ProductCharacteristicValue>
                    <value>7941 SCCP</value>
                    <ProdSpecCharDescribesProdCharacteristicValue>
                       <ID>phoneType</ID>
                    </ProdSpecCharDescribesProdCharacteristicValue>
                 </ProductCharacteristicValue>
                 <ProductSpecification>
                    <productId>Phone</productId>
                 </ProductSpecification>
              </Product>
           </hcs:ListSubscriberProductResponse>
        </SOAP-ENV:Body>
     </SOAP-ENV:Envelope>
```

INDEX